THE LANCET.

VOL. II.] LONDON, SATURDAY, JUNE 26. [1829-30.

LECTURES ON SURGERY, MEDICAL AND OPERATIVE,

DELIVERED AT

St. Bartholomew's Hospital;

BY MR. LAWRENCE.

LECTURE LVIII.

Dislocations continued.—Dislocation of the Lower Jaw—Of the Cervical Vertebræ—Of the Lumbar and Dorsal Vertebræ—Of the Ribs—Of the Bones of the Pelvis—Of the Os Coccygis—Of the Clavicle—Of the Shoulder—Of the Elbow.

Dislocation of the Lower Jaw.—THE joint that you see is formed between the condyles of the *lower jaw* and the basis of the skull admits of dislocation only in one direction, and that is forwards. This takes place in consequence of the depression of the jaw being carried further than the configuration of the bones should admit, so that the convex surface of the condyle presses to the front of the eminence which is placed before the depression in which it lodges, slips off the eminence, and then the bones become dislocated in the direction in which I now place it (bringing the lower jaw forwards). This accident does not usually take place in consequence of direct violence; it is more commonly the result of an extreme depression of the lower jaw; that is, of an immoderately wide opening of the mouth. The only varieties of this dislocation are two. You may have both condyles dislocated at the same time, or you may have only one dislocated, the other remaining in its natural position; the former occurrence is the more frequent.

Now, when the bone has passed into this unnatural position, the mouth remains permanently open, and the patient is incapable of closing it. There remains an interval between the teeth of the upper and the lower jaw of an inch and a half. In the first instance, in fact, the mouth is more widely opened, but afterwards the jaws become a little closer. You observe that the relation between the coronoid process of the lower jaw and the under part of the os malæ presents a mechanical obstruction to the mouth's being closed beyond a certain extent.

The symptoms, then, are, the separation of the upper and lower teeth by an interval of about an inch and a half, which cannot be diminished by the patient; an involuntary flow of the saliva, for it appears that the salivary glands are affected by this situation of the bone; and, of course, a very considerable impediment to the articulation.

Treatment.—Now, this dislocation is easily reduced. All you have to do is, to introduce your two thumbs as far as you can into the mouth, depress the molar teeth and elevate the chin with your fingers: thus you depress the condyles and carry them backwards into the cavities from which they have departed. The same process is to be resorted to in the case of dislocation of one condyle only, merely observing that you apply the force in that case to one side of the jaw only.

Dislocation of the Cervical Vertebræ.—The first vertebra of the neck and the occiput are so firmly tied to each other that they do not admit of luxation by external violence. But the first vertebra may be dislocated upon the second; for the occiput and the first vertebra revolve upon the second vertebra with a considerable freedom of motion; and in those bones, therefore, when the motion is carried beyond a certain extent, dislocation may occur, and a separation between the second vertebra and the first—the atlas, may be the consequence. If this dislocation be of such a nature as to liberate the dentiform process from its ligament, so as to allow of that process pressing on the spinal chord, the accident is at once fatal.

It happens sometimes that luxation takes place either between the occiput and the atlas, or between the atlas and the dentatus in consequence of disease. I have already mentioned to you, under the name of secondary or consecutive dislocation, that a very considerable change of the relative situation

takes place between those bones; that the disease which produces the dislocation may come to a natural termination, and the dislocated bone may become anchylosed in that part. Thus examples occur so extraordinary in their appearance, that one can hardly account for the patient surviving the change which has taken place. Here is an instance of that kind, in a young person where the first vertebra has been dislocated upon the occiput, or the occiput upon the first vertebra, whichever you please to term it; and the occiput and the first vertebra have been dislocated on the second vertebra, so that on opening the skull and looking into the foramen magnum, we find the dentiform process, which should be connected by ligament to the under part of the foramen ovale, sticking up into the foramen magnum, and the canal from which the spinal chord should pass so much diminished, that there is hardly room in it for any thing like the passage of that chord. This is a part of the dentiform process sticking up into the right side of the foramen magnum, and the canal is reduced by it to about a third or a fourth of its natural size.

The articulations between the first and second, and between the second and third, and between the third and fourth vertebra, are all anchylosed together by a firm bony union, as you will observe by looking at the outside. There are other specimens similar to this in other collections. This is the result of disease occurring in articulations which subsequently become anchylosed; it is the result of inflammation and ulceration of the cartilages covering the articular surfaces of the affected bones; of ulceration which produces caries of the articular surfaces of the bones themselves; which proceeds to a natural termination, and ends in bony anchylosis.

The disease in its first commencement is attended with great pain about the upper part of the neck, with an inability to move the occiput on the upper part of the neck, with such uneasiness on motion that the patient holds and supports the head with his two hands, and moves the whole of the trunk together when any lateral motion is required; and on raising the head from the pillow, or laying it down again, the patient holds the head very carefully to prevent the occurrence of any shock which might induce motion of these diseased surfaces against each other. Very frequently matter forms in the neighbourhood of the disease, just as it forms in the neighbourhood of diseased lumbar vertebræ. This matter may find its way out at some point in the lower part of the neck. It very frequently happens that disease which is situated so near to the brain and other important organs, terminates fatally in the early period of the affection; but if the strength of the patient be sufficient to carry him through the early period, as this specimen and others show, there is a power in the economy sufficient to overcome the disease, and produce a perfect cure; for the individual from whom this specimen was taken, did not die of the affection; it went through all its stages, and arrived at a complete cure before the termination of the patient's life. This, however, is a specimen occurring in consequence of disease. A similar dislocation of the dentiform process from external violence, would, in consequence of the sudden pressure upon the spinal chord, have been immediately fatal.

When you examine the mode in which the different bones that compose the spinal column are articulated, when you see the broad surfaces by which their bodies are joined, and observe the very powerful ligamentous connexions between them by means of the intervertebral fibro-cartilage, and when you observe, moreover, how the articulating processes of the different vertebræ reciprocally overlap each other above and below, you will be inclined to suppose that the representation which is generally given in surgical writings is correct, namely, that dislocation cannot occur of the spinal column, without the occurrence of fracture at the same time. Generally speaking, the articulating processes overlap each other, that is, the inferior articulating processes of the upper vertebra overlap the superior ones of the vertebra immediately below it; so that the different bones are mechanically locked together in such a way, that you can hardly conceive how the articular processes in one particular place can separate, without some fracture taking place at the same time. In most anatomical works, you will find the position is laid down absolutely, that dislocation of the bones of the spinal column cannot take place without fracture of some part of the vertebræ occurring at the same time. No doubt, generally speaking, this is correct; but an exception must be made with respect to the vertebræ of the neck, for there the articular processes approach more nearly to a plane or horizontal surface, particularly at the upper part of the neck. There is not the overlapping, the reciprocal overlapping there, that exists in the loins and in the back; so that you may have dislocation of the vertebræ of the neck without fracture. A case occurred in this hospital, and was under my own care, in which the fourth cervical vertebra was dislocated upon the fifth; and I found that the inferior articulating processes of the fourth vertebra had passed in front of the superior articulating processes of the fifth, the body of the fourth being dislocated forwards on the fifth, in consequence of a rupture of the intervertebral fibro-cartilage, and that no

fracture existed in that instance. Here is the specimen showing that accident.

Now I may observe to you, that the result of an accident like this, the effect upon the spinal marrow, the symptoms that occur in the course of the case, are exactly the same as would take place if the accident were the effect of what it more commonly is—a fracture of the spine. Until we come to examine it, we cannot know, in point of fact, whether an injury of this kind is a fracture or a dislocation, or whether there be fracture and dislocation combined together. The question therefore is one rather of an anatomical than a practical nature. There is no difference of symptoms; there is no difference of treatment; we cannot recognise during life the existence of dislocation, and, if we could, I do not know that we could venture to put into practice any means for reducing such a dislocation.

Dislocations of the Lumbar and Dorsal Vertebræ.—I know of no instance of dislocations occurring either in the dorsal or lumbar vertebræ of the spine. I believe all the accidents that occur in those regions, consist of fracture of the spinal column, which I have already had occasion to describe.

There is another species of dislocation of the cervical vertebræ, that is, a dislocation of the articular processes on one side only. The inferior articular process of one side slips forward in front of the superior articular process of the vertebra below it, so that the neck gets a little inclination towards one side. This is not attended with any material diminution of the size of the vertebral canal; it is an accident which does not produce pressure upon the spinal chord; it produces none of those serious symptoms which take place when complete dislocation or fracture occurs. It is however rather an uncommon occurrence, though still there is a specimen here of a dislocation of that kind. In this specimen you see that the articular process opposite to my finger is dislocated, although the articular process, on the other side of the bone, is not dislocated.

Dislocation of the Ribs.—I do not know whether it can be correctly stated to you, that the ribs are insusceptible of dislocation; but I never knew an instance of the dislocation of a rib; the articulation which connects the ribs with the dorsal region of the spine is so completely covered by muscles and other soft parts, that if it were to take place, I do not know that it would be possible to recognise it. The elasticity of the cartilages in front, and the firmness of the ligament connecting them to the sternum, are probably reasons why the cartilages of the ribs are not dislocated from the sternum in front.

Dislocation of the Pelvic Bones.—The bones of the pelvis admit of being separated from each other, in consequence of external violence; but the accident which thus takes place is hardly to be assimilated with those separations of a bone from its corresponding articular surfaces to which the name of dislocation is more commonly applied. The strength of the connexions between the various bones of the pelvis is such, that they cannot be separated, except under the application of a very great degree of force, such as that of a loaded carriage passing over the lower part of the trunk of the body; and if a separation of the bones takes place, it is generally accompanied by fracture of the bones, rupture of the vessels, and extensive injury of the soft parts in the neighbourhood, so that these accidents are usually fatal. The separation, when it takes place, does not admit of being restored; we cannot adopt any means for bringing the bones into their natural situation again. All we can do in an unfortunate case of this kind is to consign the patient to rest, and keep him perfectly quiet. You might, however, from the position of the lower extremity, mistake dislocation of the pelvis for dislocation of the hip-joint, and it is necessary to be on your guard against such an error. I have seen the os innominatum separated from the sacrum behind, with fracture of the pubis and ischium in front at the same time, so that the lower extremity was drawn up somewhat into the position into which it would be thrown, in consequence of luxation of the hip upwards and outwards; and, in fact, extension was actually applied in that case. The patient, however, died within twenty-four hours. It is necessary then to be on your guard against mistakes of this kind. In truth, luxation, with fracture of the pelvis, is usually attended with such serious symptoms, as sufficiently show the nature of the case to be much more important than mere dislocation of the hip.

Dislocation of the Os Coccygis.—I think dislocation of the os coccyx is described, but I fancy that it must be of very rare occurrence, and one which I do not know that we should have any means of replacing. The bone may be liable to fracture occasionally.

Dislocation of the Clavicle.—The clavicle may be dislocated at either of its extremities. It may be dislocated at the sternal or at the scapular end; but the ligaments which connect it both with the sternum and with the scapula are so strong, that this accident is much more uncommon than fracture of the bone. As the clavicle is covered on its superior surface merely by the integuments, the change of figure which results from dislocation of either end is so obvious, that the nature of the occurrence is immediately recognised.

It is very easy to reduce dislocation of the clavicle, but it is by no means easy to retain it in its position when replaced. I believe there is no other displacement of the sternal end of the clavicle, excepting forwards, by which the sternal extremity becomes so situated, as to lie anterior to the upper or first bone of the sternum; and there, as you see in the skeleton, it presents a very unnatural appearance.

Now if you bring the upper extremity into the same position as you do in reducing a fracture of the clavicle, you will reduce this dislocation; but the dislocation cannot take place without a rupture of the strong ligaments that hold the clavicle to the sternum; and, therefore, when the force which is employed for the purpose of retaining the parts *in situ* is removed, the bone immediately separates again. I fancy, however, the only apparatus you can trust to, is that which is employed in the case of fracture of the clavicle; that is, you would have a thick wedge-shaped cushion placed in the axilla, and would then draw the arm outwards over this cushion, so as to prevent it from falling forwards, and in front of the trunk; but this apparatus, and indeed every other with which I am acquainted, is usually found ineffectual. It is very frequently the case, however, after an accident of this kind, that although the clavicle may not be in its natural position, the motions of the limb are completely recovered.

The scapular extremity of the clavicle admits of dislocation upwards, so that it rides above the acromion, or the acromion is situated below it. This, as far as I know, is the only dislocation that takes place of this end of the bone. Like the other it can easily be reduced; you can press it with the fingers and thumb back again into its proper position; but the same difficulty occurs here as in the other case, with respect to keeping the bone in its situation, and in all the instances I have seen there has remained a permanent inequality; the clavicle has continued to be higher in point of situation than the acromion. Yet the motions of the upper extremity have generally been tolerably perfect.

Dislocation of the Shoulder.—The *shoulder-joint* is more liable to dislocation than any other articulation of the body; and so much so indeed, that I believe we may say that the dislocations of the shoulder equal in number those of all the other joints taken together. The looseness of the articulation, the looseness of the ligament which surrounds the articular end of the bone, the size of the head of the humerus as compared with that of the glenoid cavity of the scapula corresponding to it, the great use we make of the upper extremity—the degree of force it sustains in the various movements of the frame,—all these account for the number of dislocations of this joint. The humerus is in general thrown out of the glenoid cavity of the scapula, downwards,—is displaced in the direction of the axilla. The weakest part of the articulation is that which corresponds to the axilla: there the synovial membrane is scarcely protected by ligament, and not at all by muscles, so that when a person falls to the ground with the arm removed from the body, the limb being thrown forcibly upwards, the head of the bone is carried downwards through that which is the weakest part, the part towards the axilla, and becomes situated below the glenoid cavity and the scapula. This is the most common dislocation of the shoulder-joint, and is what is commonly called dislocation of the shoulder into the axilla.

When this accident has occurred, one of its most striking symptoms, a symptom which is immediately visible, and which you cannot fail to recognise when you come to look at the shoulder, is the vacuity under the acromion. The edge of the acromion is prominent and sharp, and the deltoid muscle, instead of forming a convexity passing from that downwards to the arm, has its fibres drawn in a straight line, and you see a want of that hollow or depression at its insertion which is very conspicuous upon contrast with the opposite side of the body. In fact, the head of the humerus no longer is situated immediately below the acromion. You observe in the natural position, the fibres of the deltoid muscle should describe a convex line in passing over the head of the bone. Now, when the head of the bone is thrown down into the axilla, the fibres pass in a straight line down to their insertion into the humerus. Not only is there this want of depression, this straight direction of the fibres of the deltoid muscle, but these fibres are also tightened; the insertion is moved to a greater distance from the origin, so that they are straightened, and appear tight and tense. Then the humerus can be felt projecting into the cavity of the axilla. Of this you are not very sensible if the patient hold the limb as near the side as he is able, but if the arm be elevated,—be carried upwards, then by putting the hand into the axilla you are immediately sensible of it. These are two symptoms which, alone, would be sufficient to characterise the accident in question. But there is, at the same time, a remarkable difference in the direction of the axis of the os humeri. In the natural state of the part the axis of this bone, when the arm hangs down along the side, is nearly parallel with the trunk; in fact, the line from the elbow to the shoulder is as nearly parallel with the body as possible. But when the head of the bone rests against the inferior edge of the scapula, you observe that the

axis of the humerus forms an oblique line, a line which runs obliquely from the trunk. Instead of the bone passing directly upwards to the glenoid cavity, it seems to go inwards towards the trunk. It is quite a different direction from the natural line of the bone. Then the patient cannot bring the elbow into close contact with his side; the elbow remains sticking out. It is true, that if the surgeon take the elbow and carry it forcibly inwards, producing a good deal of pain, it may be forcibly brought in contact with the body; but when left to itself, it hangs at some distance from the trunk, and the pain in bringing it to the side is so great that the patient can hardly be prevailed upon to make the experiment. There is considerable pain extending from the shoulder, which is, in great measure, referable to the head of the humerus, and to the large nerves that constitute the axillary plexus. Those nerves pass along the surface of the shoulder-joint; and the bone cannot be displaced in this direction without occasioning more or less pressure upon them. Such are the symptoms which characterise the most common dislocations of the shoulder-joint. There is the vacuity under the acromion; the tense state of the fibres of the deltoid muscle; the unnatural swelling in the axilla caused by the convexity of the head of the humerus; the inability on the part of the patient to bring the elbow to the side, the change in the direction of the axis of the humerus, which, instead of running from the elbow upwards to the glenoid cavity of the scapula, turns towards the trunk; the pain in the shoulder generally, and more particularly in the axilla; the want of power to execute the ordinary motions of the joint; and the stiff manner in which the limb is held in its unnatural position.

Treatment.—The *reduction* of this displacement is by no means difficult; it is accomplished by attention to two or three simple points, especially in the recent state of the accident. You fix the chest of the patient by a broad linen bandage passed round it, and tied to any firm or immoveable object. In the case of dislocation of the left shoulder, for instance, you pass a bandage round the chest, and tie it to a firm post, so that the chest is confined to that fixed point, which steadies the chest, and, through the medium of the chest, fixes the scapula. You then place the bandage by which extension is to be made, upon the humerus immediately above the elbow; and you let that be drawn by a requisite number of assistants, the arm being in the horizontal position. Thus you have the chest fixed on one side, constituting the counter-extension, and the extension applied upon the humerus immediately above the elbow; these two forces act in direct opposition, and the effect is to draw the head of the bone out of the axilla; it does not, however, bring it into the glenoid cavity, but, in order to accomplish this, you have to apply a force below the head. When you have extended it sufficiently, you depress the lower end of the bone, and by means of the force below, you push the head of the bone into the glenoid cavity. Now this is easily accomplished by the surgeon having his knee placed under the bone near to the joint. He keeps his hand upon the head of the bone; he feels with his hand, and when the bone is moved out of its situation in the axilla, then directs the assistants who are employed in making the extension, suddenly to let go; at the same moment he carries the cubital or lower end downwards, forwards, and over his knee, and thus replaces the head of the bone in its natural situation. The same principles are applied to the reduction of this dislocation as to any other. The counter-extension by which the scapula is fixed, the extension by which the bone is drawn out of its unnatural situation, and the elevation of the bone into its right situation,—these are the three points to be particularly attended to.

The reduction of a dislocated shoulder is very conveniently accomplished by means of a bedstead. Let the patient sit with the trunk close to one of the bed-posts, and confine the chest by a broad bandage to that post; then having fixed the extending bandage to the bone, carry that bandage round the opposite bed-post, and so let it be drawn by assistants. Thus you obtain two very convenient extensions. The surgeon then placing his knee under the head of the bone, and employing the limb as a lever, completes the reduction in the manner I have described.

The reduction of the dislocation of a shoulder in a recent case, is generally accomplished so easily, that you may sometimes effect it without any very close confinement of the patient. It is sometimes sufficient to accomplish the counter extension by fixing the trunk in this way:—placing a sheet round the body, and letting an assistant or two hold the patient by it, the force of one or two others in the same way being used to make the extension. If, however, you should meet with a little difficulty, you can overcome it by paying attention to the points I have already stated. You may find that the extension is greater than the counter-extension, or that the counter-extension is more than the extension. It has sometimes happened, though, that a surgeon has reduced a dislocation of the shoulder without employing extension of either kind. The patient being weakened, and his attention taken from the reduction, the surgeon having had his knee in the axilla, he has

been able to carry the head of the bone into its place, simply by the force he could employ with his hands; but this is not usually the case. There is a mode of reducing dislocations of the shoulder, which has very frequently been employed, and which is strongly recommended by Sir Astley Cooper. It is, by the surgeon placing his own heel in the axilla. The patient is placed in the recumbent position, either on the floor or on a couch, and the surgeon places himself on the same seat; he then puts his heel into the axilla, and grasps the patient's forearm above the wrist with his hands, or he has a handkerchief or a towel rolled immediately round the inferior end of the humerus, by which he draws or extends the arm, his heel being in the axilla. This is a mode which Sir Astley Cooper recommends as being very effective in recent dislocations of the humerus.

Now when the humerus has been replaced, it is proper that the limb should be kept quite quiet; in fact, it is best that the arm should be bound by the side of the body, in order to keep it motionless, while the forearm and hand are supported in a sling. This should be continued for some days, in order to allow the rent in the orbicular ligament through which the dislocation has taken place, to be united, and admit of the repair of any muscular part, or any contusion about the joint being completely healed before the use of the joint is resumed. Recollect, that a dislocation of any joint cannot occur without very considerable injury to the surrounding soft parts—without extension, laceration, straining, and tearing of the tendons and muscular fibres; and it must be very obvious to you, that the repairing of such an injury cannot but require repose for several days, and sometimes the employment of antiphlogistic treatment, for if you neglect these, you are very likely to have inflammation of the part. In the shoulder, more particularly, where the natural configuration of the bones and the nature of the ligamentary attachments are so predisposed to dislocation, the reproduction of that injury after it has been once produced, will take place very easily, unless these precautions are observed. Attention to them may be considered as generally necessary in all cases.

Now, the humerus may be dislocated in other directions; it may be thrown out of the glenoid cavity towards the front; that is, it may be dislocated towards the concavity of the scapula, in which case the head of the bone lies between the sub-scapularis muscle and the surface of the scapula.—Sometimes the head of the bone is found lying a little below the margin of the clavicle. It is said that that displacement is a secondary one—that the head of the bone is, in the first place, thrown out of the articulation at the under part, or towards the axilla, and that the action of the muscles subsequently carries it upwards and forwards into the neighbourhood of the clavicle. The dislocation forwards is not a very uncommon one, but much less frequent than the dislocation into the axilla. There is still another dislocation to which the arm is subject, but that is comparatively rare,—a dislocation in which the head of the humerus is thrown backwards, and in which it lodges in the infra-spinal fossa of the scapula. Now, it seems that Desault had never seen the luxation of the bone backwards, and I think it appears that Boyer had met with it but once. Sir Astley Cooper mentions, that in the course of thirty-eight years' practice he had seen only two cases in which the head of the bone had been thrown backwards into the infra-spinal fossa. I have myself never seen it dislocated in that direction. Whether it be dislocated forwards, or backwards, or carried up into the neighbourhood of the clavicle, there is still that particular symptom of vacuity under the acromion, and the additional symptom of a swelling produced in one or other of the situations alluded to. In every case there is impaired motion of the joint. With respect to the replacement, the general principles I have already mentioned as applicable to the reduction of a luxation into the axilla, are applicable to these several kinds, so that I have no particular directions to give you with respect to them.

Dislocation of the Elbow.—The *elbow-joint* is liable to different kinds of dislocation; the most common one is that in which the radius and ulna are thrown backwards upon the humerus, or, speaking perhaps more correctly, and according to the mode in which the accident takes place, that in which the humerus is thrown forwards upon the radius and ulna. This accident is the consequence of falls on the hands; the weight of the body causing the radius and ulna to be carried backwards and upwards, and the humerus to project forwards, below the articular surfaces of those bones. In consequence of this accident the coronoid process of the ulna, which in the state of extreme flexion is received into the anterior excavation of the humerus, passes into the deeper excavation behind the bone which ordinarily lodges the olecranon; the olecranon, therefore, is situated considerably higher on the back of the humerus than it should be. The radius is placed on the back of the external condyle of the humerus, instead of corresponding to the inferior end of that bone, and there is a large, hard, swelling in front of the elbow-joint, produced by the unnatural prominence of the articular extremity of the humerus. The elbow is perfectly stiff; it is incapable of flexion or

extension. The motions of pronation and supination are, at all events, very difficult, if not entirely suspended, and the elbow is kept either nearly in the straight position or in one in which the limb is only slightly bent. If this accident be seen soon after its occurrence, and before swelling has come on, the change in the relative situation of the bones is so considerable, that no mistake can possibly be made respecting it. However, in this, as in all the accidents that take place about the elbow, dislocation is the result of so much violence, and is attended with so much laceration and bruising, that inflammation very speedily supervenes, inflammatory swelling takes place, and usually reaches to such a height as to obscure the exact nature of the injury; it is therefore of great importance, in all accidents of this kind, to institute a very careful examination at the earliest period. You can then recognise the prominent points of the bones; you can satisfy yourself as to the facility or difficulty with which the motions are performed; you can gain evidence of the nature of the accident, which would be looked for in vain if twenty-four hours had elapsed from the time of its occurrence.

Now, you will easily see that the radius and ulna cannot be thrown backwards upon the humerus without a rupture of all the strong ligaments which usually maintain them in their position. There must be even so great a degree of violence offered to the joint, that no difficulty will be experienced in drawing the bones down and in bringing them back into their right places. All that is necessary is, that the arm should be held firmly in one state, and extension applied just above the wrist in the opposite direction. You have only to pull straight, and the bones will come down and resume their situation. Nothing can be more simple than this reduction; and the evidence that reduction is accomplished will be, the complete restoration both of the power of bending and extending the joint, and the power of pronation and supination.

The force by which this dislocation takes place is sometimes so considerable, as not only to separate the humerus from the radius and ulna, but even to force the end of the humerus through the muscles that cover the joint in front,—through the integuments, and to produce a compound dislocation. You may have the articular end of the humerus forced entirely through the skin, and presenting itself externally through a large laceration at the anterior part of the elbow-joint. When you first see an accident of this kind, you are inclined to infer that so great an injury cannot be repaired, and that it is necessary to remove the limb; however, many instances have happened, in which, when the bones have been replaced, and the edges of the soft parts have been brought together, the cases have done well without any very serious symptoms; so that a compound luxation of the elbow-joint with the protrusion of the lower extremity of the humerus through the integuments, is by no means to be regarded as a case for amputation. It is one in which recovery may take place. If you restore the parts and approximate the edges of the external wound, not only may you have a cure, but a cure with pretty complete motion of the elbow-joint. We should expect this displacement to involve a rupture of the brachial artery; however, the cases I have alluded to have done well; it is probable that the artery may have slipped aside and escaped injury. If we were certain at the time of the accident that the brachial artery was ruptured, it would constitute, ordinarily, a very serious complication of the accident, and perhaps induce some doubt respecting the nature of the proceedings it would be proper to adopt. If, however, there were merely this circumstance in addition to the accident, without any violent laceration, without fracture of bone or any other serious additional injury, the powers of the collateral circulation are so great in the upper extremity, that we might probably deem it right to try to secure the vessel, and to save the limb. It is said that the radius and ulna may be dislocated forwards; however I have never seen an accident of this kind. It must be very rare, and at all events involves a fracture of the olecranon; so that it would be nearly the case of fracture of the ulna; indeed, the configuration of that bone would not admit of anything else.

The radius and ulna may be dislocated laterally; that is, they may be driven to the one side of the humerus or to the other. You may have the dislocation outwards, so that the trochlea of the humerus corresponds to the articular extremity of the radius, that bone being carried much more inwardly than usual, or you may have a dislocation in the opposite direction, so that the sigmoid cavity of the ulna might correspond to the external condyle. These are extremely rare dislocations, usually detected as soon as seen, and easily replaced. The strong ligaments are all ruptured, and produce, therefore, no particular obstacle, nor is any difficulty felt in pushing the bones back into their former positions.

There may be a dislocation at the elbow-joint of the radius alone. I fancy you hardly ever have luxation of the ulna alone; but you may have the radius dislocated either forwards or backwards, in consequence of the hand being forcibly carried to an unnatural extent of pronation or supination. In the one case, the head of the radius is situated in front of the condyle of the hu-

merus, and, in the other, behind it. This occasions in either case a prominence which is so very conspicuous, that the nature of the accident can hardly be misunderstood. Now these dislocations are rare, in comparison with those of both bones of the forearm together. I have myself seen the accident of both kinds. There is, however, a very remarkable contrariety in the reports of the experience of Sir Astley Cooper and Baron Boyer on this subject. Baron Boyer says that the radius may be thrown backwards upon the external condyle, and that he has seen the occurrence twice, but that no authentic example exists of its being thrown forwards. Sir Astley Cooper mentions six instances of dislocation of the radius alone, in all of which the bone was thrown forwards. In two of these, one of which was seen by myself, and another by Mr. Cline, both in the recent state, the dislocation could not be reduced. I think, in two cases, Sir Astley Cooper succeeded in reducing the dislocation. He mentions one instance, in which he saw it backwards; that was an old unreduced dislocation.

The mode of reducing the dislocation, whether it be backwards or forwards, is by making extension from the wrist. If the bone have been dislocated forwards, you would make extension, and, at the same time, carry the radius in the direction of supination. If backwards, you would make extension, and carry it in the direction of pronation.

Lecture LIX.

Dislocations continued.—Dislocation of the Radius and Ulna at their inferior extremities—Of the Carpus—Of the Metacarpus—Of the Fingers—Of the Femur—Of the Patella—Of the Knee-joint—Of the Ancle.

Dislocation of the Radius and Ulna at their inferior extremities.—Dislocation, Gentlemen, of the *radius* and *ulna*,—that is, displacement of one, with respect to the other of these bones, at the *inferior* or *carpal* extremity, is very uncommon. The radius and ulna are very loosely connected to each other; the radius has a very free extent of motion, and it probably arises from this loose connexion and freedom of motion, that they give way under the application of external force, without becoming displaced. It may happen, however, that the radius may be dislocated upon the lower extremity of the ulna, by the hand being carried extensively round in the direction of its pronation. This accident you may detect, by the palm being turned towards the round inferior extremity of the ulna, and the unnatural prominence that presents at the inferior and back part of the wrist; or dislocation may take place in the opposite direction, by the hand being carried beyond the natural extent of supination, in which case the ulna slips out of the cavity of the radius, and forms a prominence on the inner and anterior part of the wrist. The accident is characterised by the hand being *fixed* in a state of pronation or supination, according as either circumstance may have occasioned it, and by the unnatural prominence of the rounded inferior extremity of the ulna, either on the anterior or posterior part of the wrist, as the case may be. The latter of these accidents, that in which the hand is carried extensively into the supine state, is particularly uncommon; but both are very rare.

The reduction of the displacement is not difficult. If the forearm be held by one assistant, and the hand by another, and the surgeon employ his finger and thumb so as to separate the bones and press the ulna back into its place, the assistant moving the hand in the direction of supination in the one case, and of pronation in the other, at the same time making extension from the wrist, the bones will go back into their natural situation. You may have this dislocation, which you may either call a dislocation of the radius upon the ulna, or of the ulna upon the radius; you may have this occurring in connexion with a fracture of the radius near to its carpal extremity, and then the replacement of the bones, the proper position of the hand and forearm, and their maintenance in the natural position, become considerably more difficult. Instances have occurred, in which the radius has been fractured near to its carpal end, where you have also a compound dislocation of the ulna; the ulna passing out through the integuments, and projecting externally.

Dislocation of the Wrist.—The joint of the *wrist* is liable to luxation. When a person falls, he naturally stretches out his hand to save himself; the hand, in such a case, comes to the ground with great force, and the whole weight of the body rests upon the upper extremity of that side. If the hand then be placed obliquely with reference to the limb, the radius and ulna will pass from off the corresponding surfaces of the articulations with which they are naturally in contact, either anteriorly or posteriorly, as the fall may be. Thus you may have the bones of the carpus presenting a hard tumour, with a great deformity either on the back, or on the anterior part of the radius and ulna. Now the deformity of the parts in such a case as this is so distinct, that there can be no difficulty in recognising the accident, and the replacement is equally easy. In reducing it, the forearm is to be held firmly, and extension made from the hand, when the parts go into their situation

without any trouble. But the mere replacement of the bones does not accomplish all that is necessary in an accident of this kind. There will be extensive laceration of the ligaments, which tie the bones together; there will be considerable laceration of the tendons and fibrous sheaths, of which a great number are situated on the posterior and anterior part of the wrist, and thus very considerable inflammation and tumefaction must result, which will require pretty active antiphlogistic treatment.

The wrist-joint may be dislocated outwards and inwards, but not so as to be attended with a complete separation of the articular surfaces. The dislocation of the wrist-joint laterally, is a *partial* dislocation —a separation of some part only, and that is easily replaced.

Dislocation of the Bones of the Carpus.—The bones of the *carpus* can hardly be said to admit of dislocation with respect to each other. The *os magnum*, that is, one of the bones of the second phalanx of the carpus, has a round head, which is received into an articular cavity, formed by the bones of the first phalanx, and there is a certain degree of motion between it and them in their natural situation. Now it is said that this accident, that is, dislocation of the os magnum, has occurred; that it sometimes occurs in females, in whom the ligaments are more soft and yielding. I never saw the accident myself, but Boyer says he has seen many instances of it. When it does occur, the bone can be pushed back into its proper situation, but it does not remain there; a degree of prominence remains on the back of the hand, that prominence being more sensible when the wrist is bent.

The joint which is formed between the os trapezium, and that bone which some anatomists call the first metacarpal bone, and others call the first phalanx, of the thumb, is susceptible of dislocation. The majority of anatomists call this the first metacarpal bone; this accident, therefore, is usually described as the dislocation of the *first metacarpal bone* upon the os trapezium. The only dislocation of this bone that can take place, is a dislocation *backwards*, when it forms, with its articular end, an unnatural prominence on the back of the thumb; the prominence is so very conspicuous, that it is immediately recognised; the nature of the accident cannot be mistaken, and if the thumb be pulled slightly at the same time, making pressure with the fingers on the head of the bone, it will be forced into its place.

A more common dislocation, is a dislocation of the *second joint* of the thumb; that is, of the articulation between its first phalanx and first metacarpal bone. This, like the former, takes place posteriorly. It is easily reduced in the recent state, by making slight straight extension of the thumb, and pressure with the fingers on the head of the dislocated bone. In this way the extremity of the first phalanx which has become placed posteriorly to the first metacarpal bone is usually brought back. But there seems to be something belonging to the structure of this joint which renders its reduction very difficult after a little time has elapsed. Baron Boyer, for example, mentions that he had found it impossible to reduce this luxation at the expiration of ten days after the accident. The difficulty that has been experienced in reducing this dislocation, has led to the proposal of cutting through the tendons in order to admit of the reduction. I believe that the best way of accomplishing the reduction is not to depend so much on the extension in the straight direction, as on supporting the inferior end of the bone at the same time that you press very hard with your thumb upon the superior or luxated extremity, pushing that over the extremity of the first metacarpal bone. The difficulty, however, that is experienced in replacing this dislocation after a little time has elapsed from the period of the accident, renders it very advisable that we should pay great attention to accidents occurring to this joint, and endeavour to recognise the displacement immediately after it has occurred, at which time the reduction may be accomplished with facility.

Dislocation of the Fingers.—The joints of the *fingers* admit of luxation. Those of the metacarpal bones and first phalanx may be luxated backwards, but from the nature of the articulation of the fingers they can hardly be luxated forwards. The luxation is so very obvious that it can hardly be mistaken.

Dislocation of the Femur.—The *thigh-bone* may be dislocated in several directions. It may be carried *upwards and outwards*, so that the head may rest upon the dorsum of the ilium; it may be carried directly outwards and backwards, so that the head may be situated on the sciatic notch; it may be displaced downwards and inwards, so that the head may project against the foramen ovale of the pelvis; and it may be dislocated upwards and forwards, so that the head shall rest upon the horizontal branch of the os pubis, or upon the portion of bone which forms the upper part of the acetabulum. In all these dislocations the orbicular ligament surrounding the head and neck of the bone, is necessarily lacerated; the displacement cannot take place without a tearing of that ligament; and it is stated that in all of them excepting the dislocation downwards and forwards, the ligamentum teres which proceeds from the cavity of the acetabulum to the head of the thigh-bone is also torn. I

do not know whether this has been ascertained by dissection to be absolutely the fact in every species of luxation excepting that in which the head of the bone rests upon the foramen ovale; however, the ligamentum teres is attached to the notch in the acetabulum, immediately before the foramen ovale, so that the head of the bone can pass over that attachment without a rupture of the ligament.

The most frequent dislocation of the hip-joint is that which takes place upwards and outwards; in which the head of the bone passes out of the socket and rests upon the external surface of the os innominatum. If we were to regard merely the configuration of the acetabulum, we should suppose this to be the least frequent dislocation, because the bony edge of the socket is higher and thicker in that direction, and seems to oppose a more effectual resistance to displacement. However, the degree of force which displaces the lower extremity in that direction is greater than any other to which the limb is liable. When a person, for instance, comes to the ground on his feet in the case of a fall, there is a most violent effect produced; the weight of the body coming on the feet, and the resistance of the surface on which the feet alight, tend necessarily to throw the bone upwards, thus producing the accident, which is more particularly likely to occur if the thigh-bone be in a situation of adduction, as the head will usually slip out of its place in the way I have mentioned.

When the bone has been displaced in this direction, we find the limb shortened to a greater or less extent, according to the distance to which the head of the thigh-bone has been carried from the socket. The foot is inverted, the foot, leg, and thigh, are all twisted inwards, so that the great-toe of the luxated extremity points perhaps to the back of the foot of the opposite side. The knee is generally a little bent, and the limb fixed in its new attitude. At all events the patient cannot, of his own accord, carry the limb, nor can he bear to have it carried, in the direction of extension, or of abduction; and if, indeed, the limb can be moved a little in the direction of flexion and adduction, such motions are only made with great pain. If the patient be thin, an unnatural tumour can be felt on the back of the os innominatum, produced by the displaced head of the bone; but, inasmuch as the bones are covered here by all the glutei muscles, it very frequently happens that you cannot distinguish its head in that situation; neither can you in all cases very clearly ascertain the existence of a deficiency in the acetabulum. These are points which you might suppose would tend very clearly to elucidate the nature of the accident, but you do not find this generally to be so. Shortening, then, of the limb, a rotation inwards of the thigh, leg, and foot, and the fixing of the limb in that attitude, these are the circumstances that characterize luxation of the hip-joint when the head of the bone is situated on the dorsum of the ilium, when the luxation is outwards and upwards.

Perhaps it does not at first view appear clearly why the limb should be rotated inwards, when the head of the thigh-bone is carried outwards upon the dorsum of the ilium. There seems to be no reason why in this case, as in other accidents occurring to the hip-joint, the limb should not be thrown into the attitude in which the action of the principal muscles of the bone would place it. Baron Boyer ascribes this to a cause which probably may be the correct one—to the effect produced by the strong anterior portion of the orbicular ligament of the joint, which proceeds from the upper and anterior portion of the acetabulum to the rough line at the root of the two trochanters. When the bone is thrown upwards, this ligament confines the basis of the neck of the bone towards the acetabulum in this situation, and prevents the bone from being twisted outwards, as the rotators would carry it.

In the reduction of this dislocation, it is necessary that you should fix the pelvis, rendering it perfectly immoveable, fixed, and steady. If you do not do this, the pelvis will move with the thigh when you come to apply the force of extension to that limb, and of course the extension will not draw the head of the bone down to the acetabulum. The first point then is to secure the pelvis as firmly as possible to some fixed point; this is accomplished by placing a folded cloth, of the kind I have already had occasion to describe, round the pelvis, carrying it over the groin of the dislocated side, making the cloth rest principally on the os pubis and tuberosity of the ischium. This is to be fastened to the post of a bed, or any firm hold. If the patient were lying now before me on his side, supposing this to be a bed, and a cloth were carried round the pelvis, it might be easily fixed to the bed-post, and that would render the pelvis perfectly firm and steady. Then the cloths, or the pulleys, by which the extension is to be made, are fixed to the lower end of the thigh-bone, just above the condyles, and the extension is to be made in a line exactly opposite to the point at which the pelvis is fixed, the direction in which the extension is carried, being rather higher than the situation of the pelvis, not exactly in a direction with it; because, if you carry it a little higher, the head of the bone will be brought in such a direction as will permit it easily to slip over the edge of the acetabulum. When the patient has been thus prepared,

the pelvis being fastened on the one side, and the apparatus of extension being fixed above the knee in the other direction, the extension begins; and when the head of the bone is drawn down towards the acetabulum, you have another point to accomplish, which is that of elevating the upper end of the bone, as it advances towards the acetabulum, so as to raise the head of the bone into the socket. That is done with a folded napkin fixed in the bend of the thigh by the surgeon, who lifts it up when he finds the head of the bone has just got to the edge of the socket. There are three points then to be attended to in this reduction; the fixing of the pelvis, the extension which is to be made in a manner calculated to draw the head of the bone down to the acetabulum, and the elevation of the upper end of the bone in such a manner as is calculated to lift it over the margin of the socket. The reduction of this dislocation is thus made very simple. You require that the pelvis should be fixed in one direction, that then extension should be carried in a line rather higher than the plane on which the pelvis lies, and that the head of the thigh-bone should be elevated, making a lever of it, in order to direct the head of the bone into the socket again. The height of the bony margin of the acetabulum, and the power of the muscles which surround this joint in all directions, render it necessary in general to employ a considerable power in reducing dislocation of the hip-joint. I should recommend you, therefore, by no means to attempt this reduction, without having previously weakened the muscular power by a copious bleeding, followed up by a large dose of antimony, so as to produce sickness. I should recommend you not to attempt it, without having the power at command which is conferred by the use of the pulleys. It is necessary, and so you will find, that you should derive all the help which you can from these sources. It is true that the French, in describing reduction of dislocations of the hip-joint, trust for the power of counter-extension merely to the strength of assistants holding the bandage which surrounds the pelvis, and that they trust entirely to force which is exerted by assistants in making the extension also. It seems to me that this is a much less secure and effectual way of proceeding than our own, and that in many instances it will at least subject the patient to the inconvenience of a repetition of trial before the end can be accomplished, supposing it can be accomplished in this way at all.

When the thigh-bone is dislocated so as to lie on the ischiatic notch, the principles of reduction are essentially the same, except that the extension must be made in a rather different direction. In the dislocation of the head of the thigh-bone upon the dorsum of the ilium, the direction of the extension for the purpose of reduction is near about across the knee of the sound side; but when the head of the bone is situated on the ischiatic notch, the direction of the extending force must be across the lower third of the sound thigh. The limb is more bent with reference to the pelvis, and that makes the difference in the mode of performing this reduction. There is also greater difficulty in the reduction of this luxation; the ischiatic notch presents an excavation into which the head of the bone is received, and in a manner lodged, so that you have greater difficulty in drawing it out of that notch than in drawing it downwards in a pretty uniform descent from the dorsum of the ilium.

In the dislocation of the thigh-bone downwards and inwards, the length of the limb is a little increased. The foramen ovale is situated rather below the acetabulum, so that when the head of the thigh-bone rests upon it, you have a slight increase in the length of the limb. The foot and the lower extremity generally are either in the state between inversion and eversion, or perhaps are a little everted—thrown a little into the direction in which the limb is seen in the case of fracture of the neck of the thigh-bone. You cannot, however, make any mistake between those two descriptions of accidents, for in the latter the limb is shortened; whereas in the dislocation I am now considering the limb is lengthened. In the case of fracture of the neck of the thigh-bone, you can draw the limb into its proper situation, and it will again pass into its unnatural position; but in the case of the present luxation, the bone is fixed in its unnatural situation.

In reducing this dislocation also the pelvis must be fixed. The extension may be applied to the lower end of the bone, as in the other species of dislocation; but when the limb has been a little extended, you then find it necessary to direct the superior end of the bone upwards and outwards, so as to lift its head over the edge of the acetabulum into the socket; indeed, this kind of extension may be performed by applying the force to the upper part of the thigh. If a broad band be carried round the upper part, just below the bend of the thigh, and extension be made at right angles to this upper portion, then let the surgeon, at the time the extension begins to operate, carry the knee of the dislocated limb across the opposite side further than it was before the operation commenced. I have seen a dislocation of the head of the thigh-bone into the foramen ovale reduced by extension into that direction; in fact, it requires very little extension in the other direction at all.

This situation of the bone which I now show you is that in which it is found, and almost by moving the bone across the other limb, while you have a pretty strong force applied to the upper portion of the bone, you bring it back into its natural position.

When the bone is dislocated upwards, whether its head lies on this broad surface of the os innominatum in front of the acetabulum, or just in front of the upper part of the acetabulum, it makes so very unnatural and so very conspicuous a prominence in the bend of the thigh, that the nature of the accident must be at once detected. It is, however, mentioned by Sir Astley Cooper, that he has met with three instances of this dislocation where it had been unreduced, in which, no doubt, the nature of the accident had not been noticed, and where the limb had remained permanently in the luxated state. I now show you two representations of one of those cases: this is the pelvis, with a view of the femur that had been dislocated upwards and forwards; and that is a view of the pelvis with the femur removed, showing the new acetabulum. This is a specimen belonging to the Museum, where the dislocation has taken place, not upwards and inwards, but merely upwards—a case of unreduced luxation. It appears singular that any person could see a displacement of the thigh-bone where the head of the bone must rest, as it would do here, directly in the bend of the thigh, forming a large, unnatural prominence, and mistake the nature of the accident; yet such is the fact.

For reducing this dislocation, it is necessary to make the extension in a line a little behind the axis of the body; draw the head of the bone downwards towards the acetabulum, and when the extension has acted a little, in this case as in the others, by means of the napkin under the upper part of the bone you elevate the head, so as to give it a direction towards the acetabulum, when it slips in. I have not seen a dislocation of this kind myself, but there was a case in this hospital a little while ago in which the bone was displaced in one of those directions; I hardly remember whose case it was.

Now, with respect to the proportionate numbers in which these several dislocations occur, Sir Astley Cooper states, that in twenty cases of dislocation of the thigh-bone, you may have twelve cases in which the head rests on the dorsum of the ilium, five of dislocation on the ischiatic notch, two of dislocation on the foramen ovale, and one of dislocation upwards; this may be about the proportionate numbers of the several dislocations.

Dislocation of the Patella.—The *patella* admits of dislocation; it may be dislocated outwards, so that its articular surface will be against the surface of the external condyle of the femur; or it may be dislocated inwards. Looking at the femur, you will see how much higher the external edge of the trochlea is than the internal, and you would be inclined to think that the patella would much more readily slip over on the inside than on the outside; yet in point of fact the dislocation of the patella *outwards* is much the more common of the two. The dislocation may be incomplete; that is, it may be partially separated from the two condyles of the femur; or it may go over either of them completely. Many of these dislocations are of so inconsiderable a kind, that some accidental movement of the patient, or some intended effort, is apt to replace the dislocation before the surgeon arrives; or if the reduction have not taken place, it is very easily performed by the surgeon. Extend the leg, and bring the thigh into a complete state of flexion upon the pelvis, so as to relax to the utmost extent the muscles which are inserted into the patella; then, by pushing against the edge of the patella which is furthest from the trochlea, you carry it into its proper position. I have known of no instance in which difficulty has occurred in the reduction of a dislocated patella, but I should observe, that in most instances in which I have become acquainted with the accident, the replacement has been accomplished before I have seen the patient. It is said, however, that a good deal of difficulty takes place in some cases. I hardly see how that can be; but at all events I know of no mode of overcoming it but by relaxing the muscles, which are inserted into the patella, to the utmost possible extent, and then I should think the finger and thumb of the surgeon might be adequate to push the patella into its place, whatever kind of dislocation may have happened. I met, however, with a case in a German Journal (Rust's Magazin) in which the patella had been dislocated neither outwards nor inwards, but where it had been half turned on its axis, so as to be placed with its two edges one forwards and the other backwards. The inner edge of the patella is described in this case as having rested on the outer edge of the trochlea of the femur, the outer edge being immediately under the skin; the anterior surface was directed inwards and the posterior outwards. The accident occurred to a young hussar, who was riding without stirrups; he had his knee forcibly struck by a soldier in the next rank. The accident was attended with great pain, and he was removed from his horse and taken home. The surgeon who relates this case says, that he could not succeed by any force in restoring the patella to its proper situation; he thereupon had recourse to an expedient which one would

readily suppose he would have resorted to under the circumstances; that is, he cut through the extensor tendon where it is inserted into the patella; but he says that he could not restore the patella to its situation, even after having done this. Unluckily he cut into the joint, which suppurated in consequence; the patient died about eleven months after the occurrence of the accident.

Dislocation of the Knee-joint.—The articular surface by which the femur is joined to the tibia is so broad, and the bones are tied together by ligaments of such considerable strength, that dislocation of the *knee-joint* is an uncommon accident. It may, however, take place, particularly dislocation *backwards*, which is the most frequent. It may be dislocated forwards, though this accident can hardly take place completely, although the joint may be dislocated completely backwards. Partial dislocation, also, may take place from one side to the other in either direction, all these accidents being the result of great force, and attended with violent bruising, perhaps laceration, and even fracture of the thigh-bone. All you can do in a case of this kind is, to restore the dislocated bones to their proper position, which is easily accomplished by extension. Place the limb in the straight position, and adopt all the means that are necessary to prevent the occurrence of inflammation. With this care, accidents which have borne a very serious appearance (for the displacement of a joint like this, independently of any other injury, would be attended with such distortion of the limb as must give it a very serious appearance) have been known to do well with more or less use of the limb or of the joint.

Dislocation of the Ancle.—The *ancle-joint* is much more liable to luxation than the knee-joint, for reasons which will be very obvious. The tibia may be dislocated inwards; it may pass off the articular surface of the astragalus, so as to make an unnatural projection on the inside of the foot, the foot being at the same time turned outwards, so that if placed on the ground after this accident, it would rest on the inner edge, the sole of the foot being turned outward in consequence of the accident. This eversion of the sole, the direction of the internal margin of the foot towards the ground, and the unnatural prominence of the ancle by the projection of the lower end of the bone against the integuments, constitute circumstances that must point out the nature of the accident.

The tibia and fibula may be dislocated in the opposite direction, that is, the tibia and fibula may be thrown off the astragalus, so as to project externally—towards the outside, and then the foot is turned in the opposite direction; that is, the sole of the foot is turned inwards, and the outer edge of the foot is directed towards the ground. In this latter accident, the tibia is almost always *fractured*. Most cases also of dislocation of the tibia inwards, are attended with fracture of the fibula a little above the joint; sometimes that portion of the fibula which constitutes the external malleolus, undergoes fracture in the same accident.

The reduction in either of these cases is not difficult: the knee must be placed in the bent position, for this will relax the two ends of the gastroc nemius muscle. The leg must be firmly held by one assistant or more, and the surgeon grasping the anterior part of the foot with the one hand, and the heel with the other, brings the foot forcibly into a state of extension, until it arrives at its right bearing with the leg. The limb must then be laid on its side, the foot supported, and the leg and foot placed on the ordinary kind of splint, which is furnished with a foot-piece; it may be necessary to have a splint furnished with a footpiece on the other side also, to retain the foot in its situation, and to keep it in its proper bearing with the leg; for the extensive laceration of the ligaments in those cases, renders the recurrence of the dislocation very easy. When you have brought the foot into its proper situation, you have accomplished but a part of your duty; you have to put the foot and leg in such a situation with the splints, as will prevent the displacement taking place again.

The tibia and fibula may be dislocated forwards upon the astragalus; may quit the surface of the astragalus altogether, and come forward upon the bones of the foot. The shortening of the anterior part of the foot, which takes place in this accident, and the apparent lengthening of the heel, show pretty clearly the nature of the occurrence. The replacement is easily effected. It sometimes happens, that the bones of the leg are luxated forwards partially; they do not entirely quit their proper bearing upon the bones of the foot; the inferior articular surface of the tibia rests partly upon the articular surface of the astragalus, and partly upon the anterior prominence of this bone, and upon the os naviculare in front of it. Now this is an accident which may be easily overlooked, for it does not cause in the first instance any marked deformity of the foot; it is attended with a shortening anteriorly; that is, the distance between the anterior end of the tibia and the toes is shorter than is natural, and there is also an unnatural prominence of the tibia upon the dorsum of the foot; there is an unusual distance between the tibia and the heel; the heel is drawn up, and the foot is slightly pointing downwards. When you come to look at the back of the leg, you will see a

much greater concavity near the heel than is natural. In the usual state, the tendo-achillis forms nearly a straight line above the heel, but on the occurrence of this accident, you find a concavity instead of a straight line. Now although these circumstances are obvious enough when you are aware of the accident, they are altogether so inconsiderable, and the nature of the accident is so concealed, that they may easily escape the eye immediately after its occurrence. The consequence of this is, that the bones become fixed in their unnatural situation, considerable deformity ensues, and the motions of the foot are restricted; the heel does not come to the ground, the foot is pointed downwards, and there is very little motion in the ancle-joint. I now show you a cast taken from a case in which this accident occurred, but was not observed immediately. You observe here the unnatural prominence of the tibia, and you see the unnatural hollow just above the heel. This pointing of the foot downward, is also very conspicuous. The cast was taken from the patient while in the hospital. The two lateral views which I now show you, are representations of an accident of this kind, in which the bones had not been replaced.

There would be no difficulty in replacing the bones, if the nature of the accident were recognised immediately after its occurrence, and the probability of non-detection of it, in the first instance, should render you very attentive to all the *minutiæ* of accidents occurring about the ancle-joint, where there is any apparent obscurity. It should lead you to be careful (supposing there is no fracture of the tibia or other accident of that kind) that the foot is brought into such a position after replacement, that you may be able to move it in every direction of which the joint admits. If you do that, of course no subsequent deformity can result.

I should mention to you, that this partial luxation forwards is usually attended, as are many of the accidents about this joint, with fracture of the fibula.

Now, *compound* luxations of the ancle-joint are not uncommon, and when you recollect that the lower part of the tibia and ancle-joint is merely covered by integuments, when you recollect that this thick bone is pushed off its natural bearing on the astragalus, and comes to be placed between the inner edge of the astragalus and the skin above it, and that the weight of the body must press upon it when thus situated, you will easily conceive how compound dislocations happen. Compound dislocation of the ancle-joint with protrusion on the inside, is by no means uncommon. Sometimes this occurrence is complicated with compound fracture of one of the bones, adding very much to the apparent seriousness of the case, and of course, to the chance of subsequent stiffness in the joint.

Heretofore this was a case that was deemed a proper one for amputation, but of late years we have learned, that if the bones be replaced, if the external wound be united, if the foot be brought into its proper position, if the limb be then placed in splints, on which it is kept motionless, the foot and leg being kept in their proper bearings, and judicious means adopted to obviate the occurrence of the inflammation, which in many cases is the consequence of such an injury, the wound unites, and in some instances the complete use of the joint is regained. When I say that this used to be deemed a case for amputation, I should add, that though this was, I believe, the general practice in accidents of this kind, no doubt it occasionally occurred, that patients would not consent to the loss of a limb for an accident of this kind, and then the surgeons necessarily made an effort to save it. In some such instances, it happened that the limb *was* saved, and thus the refusal led to a knowledge of the fact, that amputation was not *always* necessary. I myself am acquainted with a gentleman, a member of our own profession, who met with this accident forty or fifty years ago, and who took it into his head that he would not lose the limb. It was represented to him that he must have it amputated, but he would not submit to the operation, and his case did very well. He retained a limb, which enabled him afterwards to lead a very active life in the practice of his profession in the country, and he is now, as you may suppose, very far advanced in years. What then should be the *treatment* in a case of this kind? In addition to the general directions I have given you, you should close the external wound, and take all the pains in your power to put it in a situation the most favourable for union by adhesion or by granulation. Sir A. Cooper particularly recommends in this case, lint dipped in the blood to be laid over the wound, and letting it dry there so as to form a firm, hard, case, under which it very frequently happens, that the soft parts unite by adhesion, and the accident is converted into a simple dislocation; or, if this do not take place, a slight suppuration forms, and, after a time, it may be necessary to lift up a little of the lint at one edge, for the purpose of letting out a little of the matter. The application of evaporating lotions to the part, generally tends to prevent the occurrence of suppuration.

Sometimes there is a comminuted fracture of the tibia or fibula, in conjunction with an accident of this kind; but the general remarks I have made to you, with respect to the treatment, will show you the course

you ought to follow when this is the case. The comminuted fracture of the tibia, in conjunction with a compound luxation, would not of itself be a reason for amputation. In a person of good constitution, where the laceration of the external parts was not very considerable, where there was no artery of importance wounded, you might still attempt to save the limb. It might be necessary to remove portions of bone, if any were completely detached, afterwards adopting the treatment I have mentioned.

It becomes a question what ought to be done when the protruded portion of the bone cannot be replaced. Supposing you have a compound luxation of the ancle-joint with the tibia projecting, and that you cannot get the bone back again, that it is closely girded by the edges of the wound,—you might, perhaps, enlarge the wound a little. But there are instances, in which you either cannot get the bone replaced, or in which, after replacement, it becomes again luxated. In some of these instances, Sir A. Cooper has strongly recommended sawing off the protruded portion of the tibia. In his work on fractures and dislocations of the joints, he has recounted several instances in which the limb has been saved under these circumstances; the consequence of course being, that the use of the limb was in a considerable degree impaired. But, still, the limb was saved in a state which was considered preferable, probably, both by the patient and the surgeon, to a wooden leg. At all events, these cases show that the limb may occasionally be preserved; and this suggestion respecting sawing off the projecting portion of the tibia may be extended to other instances, in which the protruding bone cannot be replaced.

Dislocation of the Foot.—There are some instances, in which the *astragalus* has become dislocated, and in which it has become so completely dislocated, that the surgeon has removed it, dissected it out, and then placed the foot as nearly as possible in the natural situation; such cases have done tolerably well. There is a singular instance related by Baron Boyer, in which it appears the astragalus had been completely separated from all its surrounding attachments. It was in the case of a luxation, where, after a time, the separated astragalus protruded on the inside of the foot. The integuments became red, swelled, and ulcerated, and, in fact, the bone made its way out. Here is a representation of the case. The astragalus came out.

The other bones of the *tarsus* do not admit of dislocation with relation to each other; and, I believe we hardly know an instance of dislocation of the *toes*.

Lecture LX.

Diseases of the Joints continued.—White Swelling.—Inflammation of the Synovial Membrane; Treatment.—Hydrops Articuli.—Change of Structure, Thickening, and Suppuration, of the Synovial Membrane; Treatment.—Ulceration of the Cartilages; Symptoms.—Diseases of the Hip-joint; Symptoms; Treatment.

White Swelling.—You have seen, Gentlemen, that the *joints* undergo inflammation in consequence of injury, and that they possess the power of repairing the effects of such injury. They are also liable to various forms of disease. The joints are composed of parts dissimilar in structure; that is, they are made up of bone, cartilage, synovial membrane, and ligament. Now each of those component parts is subject to particular diseases. Disease may commence in either of them; but they are so closely connected together in the formation of the joints, that when disease begins in one, it very soon extends to the others. It not only extends to the various parts that compose the joint, but also to the external soft parts which immediately surround it; so that although the disease at its commencement may have been confined to one of the structures entering into the composition of a joint, yet, after some time, it usually involves the whole of the articulation.

The joints are liable to inflammatory attacks both of the acute and of the chronic description, perhaps more frequently to the latter than the former; in most of these cases there is enlargement of the affected part, which, nevertheless, retains its natural colour and appearance; hence the swellings that are thus produced have been called, in common language, *white swellings*; a term given to various affections of the joints in which there is enlargement, without alteration of the natural colour of the part; and the term white swelling merely denotes this circumstance—increase of bulk, without change of colour in the part. The French name their swellings *tumeur blanche*, which is perfectly analogous to the English term white swelling; they have sometimes been called *spina ventosa*, a term to which I have already had occasion to allude. It has no definite sense, and originally, I believe, was by no means applied to white swelling of the joints. The term white swelling cannot be very conveniently retained, because it embraces various affections of the joints, differing considerably from each other, differing considerably with respect to the structure which is primarily affected.

The Synovial Membrane is frequently the seat of Inflammation.—This membrane, in certain points, is analogous in its structure to the serous membrane; it has a

smooth and polished internal surface, which facilitates the motions of the joint, and from which a fluid secretion takes place. By means of this fluid, the articular ends of the bones are lubricated, and enabled to move upon each other with great facility. The synovial membrane is also analogous to the serous membrane in this circumstance, that they both form complete cavities—that they have no external outlets. But the analogy between the two descriptions of membrane does not hold with respect to disease. The serous membranes are particularly liable to that form of inflammation which has been called the *adhesive*, in the progress of which congulating lymph is effused, constituting particular adhesions in the cavity. The synovial membranes on the contrary, are more analogous to the mucous membranes of the body in this respect, which are characterised, not by the lymph which they effuse when inflamed, but by the increase in quantity, and alteration in quality of the fluid, that they naturally exhale. The circumstances which particularly therefore characterise inflammation of the synovial membrane, are, increase in the quantity of the synovial secretion, and enlargement of the joint. In consequence of the increased exhalation of the synovial fluid distending its cavity, the joint becomes enlarged.

Inflammation of the synovial membrane is produced by accidental causes, such as a bruise, a blow upon the joint, or by that kind of injury which is termed a *sprain*, and it very frequently occurs in persons of a rheumatic constitution, from those causes which are capable of producing the various rheumatic affections, that is, exposure to cold and damp; and it is not uncommonly produced in individuals of a similar constitution, in conjunction with, or in succession to other forms of rheumatic affection, in consequence of the excitement occasioned by gonorrhœa. Inflammation of the synovial membrane of various joints will take place in persons of rheumatic constitution as a consequence of gonorrhœa, a circumstance which I have already had occasion to mention.

The *symptoms* of inflammation of the synovial membrane are, in the first place, stiffness of the affected joint. I may mention to you that the knee-joint (which is one of the largest articulations of the body, which is situated the nearest to the surface, and is the most exposed to external influence) is that in which inflammation of the synovial membrane is most frequently observed. We find then that the patient in the first instance experiences a degree of stiffness in moving the joint: he perceives that the joint is puffed or swelled, and he finds it hotter than natural; there is a sensation of heat about it; it is felt to be warmer than the joint on the other side, and upon examination the hand of the surgeon detects an increase of heat. Stiffness then, or imperfection of motion, swelling, and some increase of heat in the part, are the symptoms which, in the first place, denote inflammation of the synovial membrane.

When we come to examine the swelling, we find that it is soft, that we can detect fluctuation in the tumour. We can ascertain by examination, that the tumefaction arises from the effusion of fluid into the cavity of the joint. If we place the two hands upon the two sides of the joint, particularly towards its upper part, we find we can press the fluid which produces the enlargement from one side to the other; and if we make pressure with one hand on the opposite end of the joint, putting the other hand on the lower part, particularly towards the patella, we can find a fluctuation, we can ascertain that the cause of the tumour is not any general enlargement, but that it arises from the increase of fluid in the articular cavity. With respect to the fluctuation, however, we perceive that cases of this kind differ materially. In some instances, the tumefaction of the joint is quite soft, and we can very easily detect the fluid; we can move it from one part to the other; by pressing on the tumour above, we elevate the patella from its situation, actually lift it up from the trochlea of the os femoris, and there by pressure upon it, can push it down again into a sort of cavity. In some cases the swelling feels much harder, and there are some cases, where the inflammation is violent and has proceeded rapidly, in which the swelling is so firm as to afford but a slight sensation of tumefaction to the hand. I have seen cases, which, from the tension produced by the large quantity of fluid, have quite deceived me, and have presented all the characters of a solid tumour. However, on cautiously examining those cases, more particularly if the knee is put as much as possible into the extended state, so as to relax the extensor muscles, you will be able to detect the nature of the tumour, although, at first, it may give you the impression that it is solid.

After a short time, the inflammation of the synovial membrane abates, the fluid that has been effused into the joint is absorbed, the swelling lessens, ultimately entirely disappears, and the joint is left with all its former freedom of motion; the complaint comes to a natural termination. In other instances the effused fluid is absorbed, the swelling of the joint is consequently diminished, but does not go down entirely; a degree of thickening is left, severe stiffness of motion remains, and the patient finds that he cannot use the part by any means so freely as he did before. In some instances the complaint

assumes quite a chronic character. The joint remains distended with fluid for several weeks or even for several months, sometimes a little more, sometimes a little less, but remaining considerably enlarged during the whole time, and that enlargement distinctly, obviously owing to the presence of the fluid, which can be ascertained by the hand. There are some instances in which, after the distention and the distinct observation of the fluid, absorption takes place, the joint recovers its natural size; but in a short time the effusion is reproduced, and successive attacks take place. I remember an instance of a patient in the hospital under my own care; he was 20 or 30 years of age, and was in the hospital from August to November. In that same year he experienced about ten attacks of inflammation of the synovial membrane of the knee; they came on about once in ten days or a fortnight, producing considerable enlargement, lasted about three or four days, went off, and then the joint recovered its natural size. You will not be surprised at finding such a recurrence of this affection, when you know that in so many instances it is to be regarded as a rheumatic affection; that is, as a local affection resulting from a certain diseased state of the constitution.

Treatment.—The *treatment* of inflammation of the synovial membrane is very simple; it consists in rest of the affected joint, and the general employment of the antiphlogistic plan. You must take blood from the affected part by leeches or by cupping, perhaps, in the first place, by the former, and subsequently by the latter. This loss of blood must be repeated according to the necessity of the case. You then apply lotions to the affected joint. Sometimes you are obliged to change these for fomentations and poultices; adopting such other treatment with respect to the use of purgative medicines and diet, as will be suitable with those measures. In cases of a rheumatic disposition, you may employ the *colchicum*, or, at all events combine the *vinum colchici* with the aperient medicines. The antiphlogistic treatment very often puts an end to all the inflammatory symptoms, it removes the pain and heat, diminishes the swelling, and enables the patient to move the limb more easily, though the joint remains distended by synovial fluid; the effusion is not completely removed under the antiphlogistic plan, and we are obliged to have recourse afterwards to counter-irritation. The most effective mode of applying this, is by the use of blisters. You may apply a blister of a good size in the shape of a horse-shoe, above the knee, the concavity of the horse-shoe being left for the situation of the patella, or a blister of a good size on either side of the knee-joint. Friction of the knee-joint generally, by stimulating liniments, is perhaps a rather less effective mode of accomplishing the same end. You may use the common liniment—linimentum camphoræ compositum, or that liniment combined with a large quantity of ammonia, or of the tinctura lyttæ. An ounce and a half of olive oil and half an ounce of sulphuric acid are recommended to be rubbed over the part by Mr. Brodie. The tartrate of antimony has been used as an external friction. The tincture of iodine has been recommended for external friction, combined with the linimentum saponis, in the proportion of a drachm to an ounce. In cases in which some degree of heat in the parts remains, with more or less stiffness of the joint, after the employment of the means I have mentioned, considerable benefit is derived from the application of a roller to the joint externally. By surrounding the joint externally with strips of plaster, common soap plaster or the emplastrum plumbi, and applying a common roller over that, advantage may be derived. Such cases may be benefited also in some degree by the plan of dry rubbing, by friction with the hand, using perhaps, a little flour or something of that kind, to protect the external parts from the immediate effects of the friction.

Hydrops Articuli.—It sometimes happens that the joint remains permanently distended with fluid in consequence of an increased secretion from the synovial membrane. In this state of the joint, where there is no longer any fear of active inflammation, where there is no pain, no redness, and not much stiffness, but in which the joint is permanently enlarged by the effusion, the disease is called *hydrops articuli*. In such instances we have, in the first place, to ascertain whether or not there are any remains of inflammation, and to remove them if they exist. If there be none we must adopt counter-irritation; friction, pressure on the part by strips of plaster, bandages, &c., as I have already described, are the best. In instances of effusion into the joint where it has been neglected and considerably distended for a length of time, some difficulty is experienced in removing the enlargement, and I have seen patients who have had this distention for many years, but who could nevertheless use the affected limbs tolerably well. I have not always succeeded in getting rid of the fluid and of restoring the joint to its natural size.

Change of Structure, thickening, and suppuration of the Synovial Membrane.—The synovial membrane is liable to a change of structure, in which it becomes very considerably thickened. This membrane, which in the natural state is a very thin, flaccid, and semi-transparent membrane, acquires the thickness of half or three quarters of an inch,

and becomes of a tolerably firm, fibrous structure. It is of a pale, brownish-red colour on its articular surface. The affection commences slowly, and is incidental to the adult. It commences with more or less pain and stiffness in the joint, which very soon after is found to be enlarged, and gradually augments in size still further. On examining the swelling in these cases, it is found to be elastic to the touch, not like the tumefaction of the synovial membrane arising from the effusion of fluid into the joint, but soft and rather elastic. The pain in these cases is considerable. If the patient proceed to use the joint in spite of the stiffness and pain, very considerable uneasiness is experienced, and if much employed, if the affection have lasted for some weeks or for some months, suppuration in many cases takes place in some part of the thickened membrane, which discharges itself externally, the opening generally remaining fistulous. Sometimes formations of matter take place in other parts, and thus you have at last fistulous openings in various parts of the joint.

The constitution suffers while this is going on. The patient (more particularly when the stage of suppuration arrives) loses his appetite, his rest, and his flesh; the state which is sometimes termed hectic supervenes; and if the affection be not effectually put a stop to by amputation of the affected part, the patient most probably sinks under the disease.

When the joint has been amputated it is found, perhaps, on cutting into the cavity, that there is matter of some kind within, and that the synovial membrane is converted into the texture I have just mentioned. The surface of the membrane which is towards the joint, presents a pale reddish-brown colour, and is unequally granulated,—is very irregular. When we come to make sections through it, the thickness which I have just mentioned is discovered, and the structure is found to be pulpy; but on cutting through it, and looking at the surface, there is observed more or less of the appearance of absorption, in connexion with this change of structure. Now, this is not confined to the part which passes between the articulation forming the bag: we find, in many instances, that it extends to the reflected part of the synovial membrane; and that the thin and almost imaginary portion of the membrane which covers the articular cartilages of the joint is concealed by it, so that a considerable part seems quite hidden by a kind of red flesh growing over it. The ligaments, perhaps, are free from disease, and so perhaps are the cartilages; at all events if either are affected, it will be the cartilages. There is a preparation taken from a case in which I remember amputating the limb, and the appearances of which on examination I very well recollect, in the museum of the hospital,—I do not see it on the table,—in which the enlargement of the synovial membrane is visible over the articular cartilages of the joint.

Treatment.—The ordinary plans of *treatment* seem to possess very little efficacy in this peculiar state of degeneration of the structure of the synovial membrane. Mild antiphlogistic means may occasionally produce some benefit by allevinting particular symptoms, and there may be occasional inflammations, which the local loss of blood will remove; in the formation of matter also, you may derive advantage from fomentations or poultices, and *rest*, of course, as in all other affections of the joints, is advantageous; but none of these measures have the power of arresting the progress of the affection, and the effect of counter-irritation seems to fail. It is observed by Mr. Brodie, to whom we are indebted for first pointing out this particular affection, that the change in joints proceeds regularly, goes from bad to worse, terminating ultimately in those repeated formations of abscesses about the joint which excite hectic fever, and that the affection proceeds regularly in this way, unless it be arrested by the removal of the affected part. He seems to be of opinion, that medical treatment has no power whatever to arrest this particular change. I do not know whether the experience we at present possess, is quite sufficient to authorise this conclusion; quite sufficient to induce us to acquiesce in the assertion, that we have no power whatever over this particular affection; but, certainly, as far as my own observations have gone, in the cases which I have seen, the progress of the disease has accorded very much with what Mr. Brodie has described; I have been led, therefore, to suppose, that in most instances, the mode of treatment which may be employed with advantage in other cases, possesses very little power over this affection, the necessity ultimately arising to perform amputation of the joint.

Ulceration of the Cartilages.—*The cartilages* covering the articular ends of bone, are very liable to *ulcerate;* and this ulceration will take place under various circumstances. I have known it occur in consequence of acute inflammation affecting the interior of a joint, and removing the cartilages covering the bones of that joint, within the space of two or three days. In a case of phlebitis (inflammation of the vein taking place after venesection) that came under my own care in this hospital, the patient had pain in his knee-joint, commencing on the 4th. He died on the 8th day of the same month; and on examination after death, I found the knee-joint filled with pus of a

reddish colour, that is with a pus rendered red by the admixture of blood. The synovial membrane which had produced this pus, was highly inflamed, but the articular cartilage of the femur, and the corresponding articular cartilage of the tibia, were completely destroyed, and this high degree of ulceration had been produced within the short period I have mentioned.

When necrosis attacks the shaft of a long bone, though it does not involve the ends, yet the mortification extends sufficiently to the extremities to excite inflammation and absorption of the cartilages, although the synovial membrane does not become involved. Here is a case in which the whole shaft of the thigh-bone has perished, and the cartilages have been as completely removed as if they had been cut out by the knife. In the case of penetrating wounds of a joint, where inflammation arises in the interior of the joint, and where the synovial membrane becomes inflamed, we find the cartilages, probably, in consequence of inflammation, undergoing absorption. Here is, for instance, the astragalus, one of the articular surfaces of which is covered with cartilage, while the other is not. This is the surface corresponding with the articular surface of the tibia, in which the bone is seen as completely as if the cartilage had been dissolved or removed by some mechanical means in the most perfect manner.

The ulceration of the cartilage, then, not only takes place under the various circumstances I have mentioned, but it begins as an original affection of the joints. Without any disease of the synovial membrane, without the occurrence of any accident or injury to a joint, it may commence as a primary or original affection of the joint itself. The ulceration of the cartilages is attended with two circumstances, which are very different from those we observe in ulceration of other structures. There is no formation of pus, nor do we ever find granulations produced from diseased cartilages—no attempt at reproduction of the cartilaginous structure. Although ulceration of the cartilages may be in the first instance limited to the cartilaginous structure itself, yet it soon involves other parts of the joint. It extends, in the first place, to the bony articular extremities, which become ulcerated, and are, in common language, rendered *carious*; the synovial membrane and external soft parts about the joint become inflamed; small abscesses form and break externally; a succession of these takes place in various parts of the joint, and a number of fistulous openings are established about the joint, giving place to matter, and, in many cases, to carious portions of bone. The ulcerative process often extends to the ligaments that connect the articulations; the consequence of which is, that the bones are no longer retained in their relative positions, but are thrown into certain unnatural directions, by the action of the strong muscles of the limb. When the knee-joint, for instance, is the seat of inflammation, the tibia and fibula may be drawn from the condyles of the femur towards the ham, forming a consecutive dislocation. When the hip-joint is attacked, the head of the femur is drawn out upon the dorsum of the ilium, and a shortening of the thigh takes place. When seated in the joints of the occiput, the atlas, and the second vertebra of the neck, it leads to those luxations in the neck which I have already had occasion to mention.

Symptoms.—Ulceration in the cartilages of a joint is indicated, in the first instance, by pain in the joint; this at first is slight, but soon becomes severe, and increased by motion of the part. You will easily believe this latter to be the case, when you see that the surfaces which move upon one another, instead of being perfectly smooth and insensible as in their natural state, are rendered rough, and perhaps preternaturally sensible by the disease. Motion of the joint in this case is, therefore, excessively painful. Pain, then, and its aggravation by motion, are the two symptoms which, in the first place (without any increase of size, or swelling), characterize the complaint. In consequence of the communication of the disease to the soft parts, the joint subsequently becomes enlarged. In the advanced stage of this affection, when suppuration has occurred, and abscesses have formed in various directions, communicating with carious portions of the bones, the constitution of the patient of course suffers; in fact, a hectic condition of the system comes on, and if the disease be not arrested, or the joint removed (supposing we have no power to stop the affection), the patient will sink under the irritation.

In consequence, however, of the remedial means, the disease in the joint is sometimes stopped; the progress of ulceration, or caries of the bones, is arrested; granulations arise from the ulcerated surfaces, and inosculate with the granulations on the opposite surfaces; anchylosis ensues, and, ultimately, bony union may be formed between the articulations; the patient then recovers with loss of motion in the part, with a stiff or anchylosed joint. In other instances the affection proceeds, the caries extends, external inflammation goes on, suppurations are renewed from time to time, and the consequent constitutional irritation wearing out the patient, death arrives and concludes the scene.

Ulceration of the cartilages of joints is chiefly incidental to young subjects; the great majority of cases are seen in individu-

duals below the age of thirty years, after which period it is comparatively rare to find the disease; not, however, that patients after that time of life are entirely exempt from the occurrence of this affection.

Diseases of the Hip-joint.—I have had occasion to mention to you, that the knee-joint is especially subject to inflammation of the synovial membrane; and I have now to observe, that the hip-joint is especially subject to ulceration of the cartilages. This may occasion ulceration of the knee-joint, and, indeed, is not very uncommon there, and probably inflammation of the synovial membrane may occur in the hip-joint; it is difficult, however, to recognise it, for the situation of the joint prevents us from observing those symptoms which should characterize the affection; and, I think, when we find disease occurring there, we need hesitate but little to regard it as the *morbus coxarius*, in English called *caries of the hip—scrofulous* caries of the hip-joint. The great majority of these cases certainly occur in children. Where you see one case of disease of the hip-joint after the period of puberty, you will, I should think, see forty or fifty taking place before it.

Symptoms.—Disease of the hip-joint shows itself, in the first place, by stiffness, imperfection in the movements of the articulation. The child affected is probably observed by its parents to limp, to be lame, not to support itself well on one side of the body. In many cases very great pain is experienced by the child. At this time, perhaps, the imperfect movement of the limb has been observed by the parents, independent of any other symptom. If, however, the child is induced to move the limb (and parents frequently do that under the impression that exercise must be advantageous), considerable pain is experienced. On examining the hip (for in such cases our first attention is naturally directed to the discovery of the affected motion), lay the child on a bed, take the limb in one hand, and endeavour to move the joint; we sometimes find that the knee can be moved towards the abdomen, and that we can bend and extend it with considerable freedom; yet, upon accurate examination, we shall find that there is very little motion of the hip-joint, but that the hip-joint and pelvis move altogether, and that the child possesses considerable power of moving the pelvis on the vertebral column; if, therefore, you are not very particular, you may form an erroneous opinion on the subject. Pain is experienced by pressure on the external surface of the hip-joint, when in the extended state. If you press on the trochanter, or extend it—if you press the lower extremity against the acetabulum, by putting one hand upon the knee, or, with the knee and leg extended, if you press against the sole of the foot, pain will be excited in the hip-joint.

At this period very considerable pain is often felt in the knee-joint; patients complain of that part, saying they feel no pain in the hip-joint. Now, this affection of the knee is altogether sympathetic, and on making pressure there you will find that no pain is excited; that there is perfect motion, and no disease whatever existing in the joint; thus you may be assured that the loud complaints of the patient, as referred to the knee, are occasioned simply by a sympathetic sensation. The thigh and lower extremity altogether, when compared with those of the opposite side, are usually found diminished in size. The cause of this is, that the patient has not used the limb freely, and that muscles, when not employed, always shrink; a loss of substance is thus observed in the affected limb.

A remarkable circumstance in the affection of the hip-joint is the *alteration in the length* of the limb which occurs at various periods of the complaint—alterations in its length as compared with that of the opposite sound extremity. In the earlier period of the disease we sometimes find the affected limb longer than that on the sound side, and sometimes shorter; in a more advanced period of the affection we find it considerably shortened. Now, the lengthening or shortening in the early period is only apparent; but the shortening in the subsequent stage is real. In the former it depends on the position of the pelvis; hence when the lower extremity of the affected side appears to be longer than that of the other, we shall find that the anterior superior spine of the ilium on that side is so much lower than its fellow; if the extremity of the sound side appear to be the longest, we shall find that the anterior superior spine of the ilium of that side is lower down than that of the affected side. When a patient has this disease of the hip-joint, the weight of the body is not supported on both hips, but by that of the sound side; so that when the patient stands erect, the sound thigh sustains the weight of the trunk, and the diseased lower extremity is placed in front of the sound leg, the knee being a little bent, and the anterior part only of the foot brought to the ground. Under these circumstances the pelvis, generally speaking, sinks a little towards the diseased limb, and this is compensated by the limb being bent a little towards the opposite side; a degree of curvature of the spine is thus not unusual in affections of the hip-joint. In other instances, however, the patient bends the knee slightly on the affected side, and rests the foot on the ground; this will be attended with an apparent shortening of the extremity. In order then to form a correct

judgment you must strip the patient, and make the examination on a straight horizontal surface. You will then immediately observe the position of the pelvis, and discover the cause of the apparent elongation or shortening of the affected limb. At all events, you may remove every doubt as to the apparent or manifest shortening or elongation, by measuring on each side from the anterior superior spine of the ilium to the patella; this will enable you to ascertain whether there is a real, or only a seeming alteration in the length. The change, however, in the subsequent period of the affection is quite a different matter. The disease, as it proceeds, is attended with destruction of the ligamentum teres, with ulcerative destruction of the orbicular ligament of the hip-joint, with destruction and ulceration of the head of the thigh-bone, and of parts of the acetabulum. Thus all the causes which would prevent the muscles from retracting the limb are removed; the muscles, therefore, draw the extremity upwards and outwards, and a real shortening, to the extent of some inches, is the consequence. Here is a specimen in which the head and neck of the thigh-bone are removed by absorption; they are quite gone, the acetabulum also being very much changed by the ulcerative process. Here is another head of a thigh-bone, where the upper part is separated from the rest of the bone, and found loose in the cavity of the joint. This is a specimen of affection of the hip-joint, where the bone has been luxated in consequence of disease; although the head is entire, yet the cartilage is destroyed by ulceration.

You will immediately perceive then, that these changes must be attended with a very considerable shortening of the limb. If the disease be brought to a termination, if it end either naturally or in consequence of treatment, the upper extremity of the thigh-bone becomes anchylosed to the upper and outer part of the os innominatum; the limb remains permanently retracted and shortened; the joint itself is, in fact, destroyed; bony anchylosis takes place, and the movements of the hip are lost.

Treatment.—With respect to the *treatment* of ulceration of the cartilages of joints, I should say that this perhaps is one of the cases comprehended by some writers under the name of *white swelling*, in which the plan of counter-irritation is the most applicable. In the commencement there are symptoms and states of the joint in which moderate antiphlogistic treatment will be advantageous,—the abstraction of blood by leeches or by cupping, and, in some cases, the application of fomentations and poultices and other suitable means of that description. You will understand that in all cases where joints are diseased, rest is to be observed; this is a most essential point. Then after all that is possible has been accomplished, our great reliance must be on counter-irritation. In this respect our treatment at present seems to be just the same as it was in the days of Hippocrates, for he says with respect to this very disease, that patients who are the subjects of it become lame unless they are *cauterised*; that is, unless the hot iron is applied to them, for that was the mode in which counter-irritation was employed in his days, and the mode which some modern surgeons conceive to be the best, although it has very much fallen into disuse in this country. Our choice of means lies between the caustic issue, from which a discharge may be kept up by means of peas or beads, and rubbing the surface occasionally with potash or caustic; the application of moxæ, which is a kind of actual cautery, setons, or the actual cautery itself. The actual cautery is very strongly recommended in hip-diseases and other affections of that sort, by professor Rust of Berlin, who has written a work on ulceration of the hip-joint, and who considers the application of the hot iron as preferable to, and more efficacious than, the other means of employing the same principle.

In the case of disease of such joints as admit of amputation, in cases where the disease cannot be arrested by the plan of treatment I have just mentioned, where the progress of caries goes on in the bones, where you have repeated inflammations and suppurations of the external soft parts, where the constitution is suffering severely from the irritation produced by the local injury, where the appetite of the patient is gone, where his rest is destroyed, and where he is losing flesh every day,—under these circumstances it is necessary, if the situation of the complaint admit of it, to remove the joint in order to save the life of the patient. Such cases are very proper for amputation; but I may observe that where diseases of the joints are carefully treated, more particularly where proper and judicious treatment is employed in the early stages of the affection, a case for amputation very seldom occurs; and I cannot help observing with considerable satisfaction, that I think surgery has of late years made great progress in this respect. Comparing the number of operations now performed in the London hospitals, with those performed at the time I first attended them, I certainly do observe a very great diminution in the operations. I should think that in this hospital there is not more than one amputation performed in cases of this kind, where within the time of which I have a perfect recollection, there used to be eight or ten.

CLINICAL LECTURE

BY

Dr. ELLIOTSON.

Delivered at St. Thomas's Hospital, June 7.

DISEASE OF THE HEART AND LUNGS.

I now enter upon the cases presented, dismissed, or deceased, in the month of June. The first is a fatal case of disease of the heart and lungs. The patient was 31 years of age, and had been ill, he said, six weeks, but in all probability a much longer time, though only obliged to lie by for six weeks; he had been a great dram-drinker, sometimes taking as much as eighteen or twenty glasses of gin in the day, and was continually wet through, as he got his living by selling things about the streets. His symptoms were, extreme dyspnœa, so that his eyes looked starting from his head, the face was rather swollen and pale, the eyes blood-shot and tinged with a leaden hue, the lips of a dark colour; he had pain across his forehead, was unable to lie either upon his left side or upon his back, started up in his sleep for want of breath, had violent occasional cough, pain across the præcordia, œdema of the legs, the respirations about thirty in the minute, the pulse weak and about 110; sibilous rattle was heard all over the back, and the greater part of the front of the chest; little respiration could be detected in the lower half of the chest in front, particularly on the right side; with respect to the heart, a strong, rough, bellows sound was heard when the ventricles contracted, shrill, like the noise of a fine, small saw, at the sternum, but to the left, a base, sonorous, and bellows sound; the variety of the sound, at the distance of merely an inch, was very remarkable; the action of the heart was not strong, but appeared diffused. He was bled to fainting, not for the purpose of making a sudden impression upon the system, but for the purpose of getting as much blood as possible away, on account of the extreme difficulty with which it was passing through the chest. Five grains of calomel were ordered to be taken every six hours, with fifteen minims of tincture of digitalis, as the sibilous rattle showed an inflammatory state of the bronchial tubes to exist. On the 7th of May the pulse had become full and hard, and I cupped him over the region of the heart to a pint, increasing the tincture of digitalis to a scruple.

On the 10th, he had no pain at the præcordia; the cough was nearly gone; the breathing was so much relieved that he could lie well any way; the heart beat full and strong, and still in a diffused manner, and the pulsation of all the arteries was very strong. On the 11th he was bled to twelve ounces. Notwithstanding all this relief, the respiration was not more audible in the chest than before, and indeed was scarcely audible at all on the right side, and was still no where heard without a sibilous rattle. The right side of the integuments of the chest had become exceedingly œdematous, so that they pitted to the depth of nearly three inches. The sibilous rattle showed that the inflammation existed to a great extent in the bronchial tubes, and therefore the want of respiration might be fairly ascribed to imperviousness that had taken place in the lungs themselves; but when I considered the extreme œdema of the right side of the chest, I could not but conclude that there was also effusion into the right pleura, notwithstanding there was no ægophonism. The phenomenon of ægophonism is only heard when the effusion is moderate, and if the air passages of the lungs, surrounded by the effusions, are open. Here there was every reason to think the lungs solidified, where no respiration was heard, from the decided pulmonary symptoms. The bellows sound showed an impediment to the passage of the blood from the heart through the aorta, but as it was ventricular, and there was evidently great obstruction to the course of the blood from the right side of the heart to the lungs, this was just as likely to arise from the right auricle being exceedingly distended and compressing the aorta. Notwithstanding the man declared himself so much better, the auscultatory symptoms, found on examining his chest, proved that there was as little probability of his recovery as ever. The mercury was omitted when his mouth became sore, and squills and nitric æther were combined with the digitalis, but he died suddenly on the 1st of June.

Effusion was found in each pleura, but an immense quantity in the right; the right lung was, in its lower two-thirds, quite fleshy, so as to be nearly impervious to air; the right auricle was immensely dilated, and both ventricles were likewise dilated in an inferior degree, their natural thickness, however, was retained; no disease existed at any of the openings of the heart.

PERIPNEUMONIA.

At No. 38 was a case of peripneumonia. J. C., aged 65, and ill a month with cough, very slight expectoration, tightness and soreness of the front of the chest, crepitous rattle in the left lung at its posterior lower and middle part. These symptoms clearly pointed out inflammation of the air-cells, or peripneumonia; and, as at the same part the sound on percussion was rather too dull, and

the voice stronger there than at other parts, or what is called bronchophonism was taking place, the lung was, no doubt, passing from the first stage of inflammation to the second, or that of solidification; there was also headach and vertigo. I bled him to a pint, and gave him three grains of submurias hydrargyri three times a day; the blood proved both buffed and cupped. Not being fully relieved, he was cupped where the crepitous rattle was heard the loudest, and afterwards blistered. The natural sounds of the lung returned, and he was presented well upon the 3d of June.

The next two cases occurred in females, were inflammatory, and well illustrate the variety in symptoms, accordingly as the inflammation is situated higher or lower in the alimentary tube, and the importance of ascertaining whether these symptoms arise from inflammation or not, and the facility of curing the complaint, if after an accurate examination such a diagnosis is made.

GASTRITIS.

The first patient, H. N., at No. 7, in Mary's ward, aged 17, had been ill five weeks; the symptoms were frequent vomiting. On examining into the cause of this disturbance in the function of the stomach, the epigastrium was found to be tender, and particularly in the cardiac half; a sensation of heat was felt there within, and up the throat. There were the general signs of an inflammatory state, namely, great heat, thirst, and a quick and rather full pulse; the bowels were undisturbed. Without any medicine, excepting a little castor-oil when the bowels were torpid, the case was presently cured by the mere abstraction of blood; a pint was taken from the arm, twenty leeches applied to the epigastrium, and these were repeated about five times. She was presented well upon the 3d of June. If I had attempted to stop this vomiting by saline draughts or opium, I should have failed; and if I had given æther, and other stimulants, which often stop it when there is no inflammation, I should have made bad worse.

INFLAMMATORY PURGING.

The very same observations apply to the remaining female case, that of F. W., aged 31, who was admitted May 16th. The disturbance of function here was lower down; there was diarrhœa, with fæcal but slightly bloody stools, severe griping and tenesmus, which showed the affection to extend to the rectum. I found the whole abdomen very tender and hot. The case was evidently one of inflammation of the mucous membrane of the intestines, of which the purging and griping were the consequence. She had been frequently in hot climates, where she had suffered from dysentery; she had now been ill for only a few days. Twenty leeches were applied to the abdomen, and no medicine given, and a large poultice afterwards applied. These had the effect of at once removing the tenesmus and diarrhœa, the tenderness of the abdomen, and the bloodiness of the stools. On account of a little tightness of the chest and cough, a similar number was applied over the sternum a few days after, and she took ten grains of extractum conii three times a day; she was confined to milk diet entirely, as the last patient was to barley-water. She was presented well upon the 3d of June. Had I not ascertained the inflammatory nature of her diarrhœa, but exhibited opiates and astringents, I might, indeed, have locked up the intestines for a time, but have induced, probably, active inflammation of a dangerous kind; and if serious mischief had not resulted, at any rate the diarrhœa would have returned with redoubled violence.

GASTRITIS.

Among the men, was likewise a case of gastritis. J. P., aged 38, ill twelve days, with great tenderness of the epigastrium on the least pressure, a sense of burning there, and at the throat; great thirst. In him there was no vomiting, but there was costiveness; and very probably this arose from the state of his head, for this ached considerably, and I found he had, like a true Irishman, had many severe blows upon the head in his time. He was cupped over the epigastrium to a pint, took twelve grains of calomel immediately, and half an ounce of castor-oil in the evening: it was found necessary to continue the castor-oil every day. By these means, his complaint of twelve days standing was entirely removed. He was confined to slops only. He was admitted on the 25th of March, and would have been presented in the beginning of April, but for my then learning that he had sores upon his legs; these sores evidently depended upon an inflammatory state of those parts, for the whole legs were tense, hot, and red, and the mode of curing the ulceration was to get rid of the inflammation. Leeches, therefore, were applied, and cold solution of lead; plain cold water is just as good an application as a solution of lead to an inflamed skin; but if the surface is raw, the addition of lead is unquestionably very soothing. I also purged him well every day with saline and vegetable purgatives. Under this treatment the inflammation subsided, and the ulcers healed, but his old complaint of headach, which, from the blows he has had, will be

likely to return from any excess of diet or any general indisposition as long as he lives, became so severe when the legs were nearly well, that I was under the necessity of bleeding him to the extent of a pint three times in the latter end of April. He, however, left the hospital well on the 3rd of June.

RHEUMATISM.

There have been two cases of rheumatism: the first, R. J., aged 35, who had been ill seven weeks, was interesting, on account of its affecting the chest particularly. He was confined to his bed, and complained of great pain all over the front of the chest. That this was rheumatic, I had no doubt, from the following circumstances put together. He had decided rheumatism of his extremities, heat, pain, and tenderness; he sweated profusely, as is common in acute rheumatism; quick inspiration gave him sharp pain of the chest, not in any one point, as in pleuritis, but more diffused; moving the arms, so as to put the pectoral muscles in action, also gave him pain; and what is more, the least pressure, such as could not affect the pleura, produced a cutting pain, indeed the whole front of the chest was tender; I therefore saw no occasion to bleed him, but put him upon milk diet, and gave him half a drachm of vinum colchici three times a day. He speedily recovered, and complained chiefly of debility and sweating, when I did not hesitate to give him decoction of bark and sulphuric acid, which soon removed these symptoms. There was, however, a little soreness of the chest, and he longed for a blister, in which I saw no harm in indulging him, and he left the hospital well on the 3rd of June.

The other case of rheumatism was also inflammatory. J. H., aged 47, had been ill a year and three quarters, of rheumatism of various joints, but he now complained of it only in his left wrist, which was swollen, hot, hard, and painful; he was hot, especially at night, and had a full pulse; he, however, complained likewise of a great sense of heat at the stomach, and tenderness. The inflammatory state of the rheumatism was adapted for colchicum, and I therefore gave him half a drachm of the wine three times a day; but on account of the heat and tenderness of the stomach, I thought it advisable in the first instance to abstract blood, and, the pulse being full, prescribed venesection to half a pint. That there might be still less chance of the stomach being irritated, he took half a drachm of the carbonate of magnesia with each dose; twenty leeches were applied every other day to the stomach and wrist alternately, and when the colchicum purged him, the magnesia alone was given, and he was presented well upon the 3rd of June.

ECTHYMA.

The next was a case of ecthyma of the hands, with ulceration exactly like that of which I spoke in the last lecture occurring about the knee: it had existed two months. There was severe headach and giddiness; there was some reason to suspect insanity in the man, and he had formerly had injury of his head. I therefore began by bleeding him to twenty ounces, his pulse being full, and he a strong fellow: in the course of ten days, this venesection was repeated twice to the same amount; he also took five grains of calomel twice a day till his mouth was affected, when he only took it every other night, and I gave him this, not only on account of its utility in ecthyma, when there is strength of system and an inflammatory state, but on account of the inflammatory condition of the head, and the circumstance of his having pain in his limbs, worse at night, and my learning that he had not long before had primary symptoms of syphilis; of course he was put, like the last patient I spoke of, upon milk diet, and purged daily with salts and senna, as soon as the calomel was given but every other day. He was presented well upon the 3rd of June.

AGUE.

The only remaining case was one of ague, a tertian of four weeks standing, the fit occurring at noon, and the disease caught last harvest in Lincolnshire, the patient having been ever since in London, and not attacked till now. I gave him ten grains of the sulphate of quinine twice a day, and he never had a fit after his admission.

June 14.

DISEASE OF THE MITRAL VALVE OF THE HEART, AND APOPLEXY OF THE LUNGS.

Before I begin the regular subject of the lecture, Gentlemen, I beg to show you a fine specimen of disease of the mitral valve of the heart, and of apoplexy of the lungs, which has been given to me by a medical friend. You will observe the curtains of the valve to be grown together all around, so that it extends like a pouch into the left ventricle, bound down to a great extent on the outer part, but loose and long in that portion which faces the septum. The opening into the ventricle is consequently much nearer the apex of the heart than natural, very small, and irregularly circular, and its edge beset with excrescences containing particles of bone, while the opening from the auricle is of a crescent form, and exceedingly narrow, deserving rather the name perhaps of a chink than an opening, so that a canal exists along the valve between the opening from the auricle and the opening into the ventricle. This obstruction to the

course of the blood occasioned, I understand (for I never saw the case), loud bellows sound immediately before and after the stroke of the heart and the pulse, that is to say, when the auricles contracted; and this I think sufficiently disproves the notion of those who contend that Laennec was mistaken, and considered the action of the auricles to be that of the ventricles, and *vice versâ*; for when the obstruction exists to the course of the blood from an auricle, the morbid sound is always heard at the time when Laennec supposes the auricles to contract, while an obstruction to the mouth of the pulmonary artery or aorta causes the morbid sound when the ventricles are said by him to contract. The state of the lungs is what has been termed apoplexy of them; that is, in different parts, knobs, some small, some very considerable, may be felt. On cutting into these, they are found to be solid, circumscribed, and of a deep dark-red colour, the texture between them being perfectly healthy. The incised surface is minutely granulated, and on squeezing these knobs a large quantity of black blood oozes just as when you squeeze a leech that has been sucking; and if I were to macerate this, and wash it for days in water, and then squeeze it, you would see blood sweat forth at innumerable distinct points. From the granulated appearance of these incisions, and from the frequent occurrence of profuse hæmoptosis during life in this affection, it is supposed that it is neither more nor less than an effusion of blood into different sets of air-cells. I am not sure that this view is quite satisfactory, because I think we then should have hæmoptosis in every case; there is indeed, in general, frequent and very profuse hæmoptosis in this disease, but sometimes none. I am told there was at the utmost a little occasional bloody expectoration in the present case. The auscultatory signs of the affection are, crepitous or crackling rattle, and no respiration at all at the spots affected, if these are of any magnitude. In this patient, there was no respiration at several points of the chest. The coincidence of this state of the lungs, and the obstruction of the mitral valve, is remarkable, because Dr. J. Wilson read a paper at the College of Physicians this winter, communicating three cases of this coincidence. I have examined many cases of constriction of the mitral valve, but never before noticed at the same time this state of the lungs; and in no instance of this state of the lungs did I ever before meet with constriction of the mitral valve, and therefore the coincidence may be accidental; still I am happy to communicate this case to you as another example of Dr. Wilson's remark. The term pulmonary apoplexy, given by Laennec to this affection, appears to me exceedingly improper. The reason he gives is, that it evidently results from a sanguineous exhalation into the air-cells—that it perfectly resembles the cerebral sanguineous exhalation which produces apoplexy. But pressure upon the brain from any cause besides sanguineous exhalation produces apoplexy, effusion of serum, pus, depression of bone; and apoplexy is not a morbid state of parts, but a certain set of symptoms; it is a general loss of sense and motion—"motus voluntarii (in the words of Cullen) fere omnes imminuti, cum sopore plus minus profundo, superstite motu cordis et arteriarum." Other writers appear to have used the name before Laennec, but no one to have described the disease precisely. It is curious that I gave a minute account of the disease in the Annals of Medicine and Surgery for 1816, three years before Laennec published, stating "that in a man who had died from attacks of hæmoptosis, which nothing checked, the surface of the lungs presented numerous hard, circumscribed, dark patches of various sizes, from that of a sixpence to that of half-a-crown; on cutting perpendicularly through which, the hardness and dark colour were found extending inwardly an inch or less equally circumscribed as on the surface, the intervening spaces being perfectly healthy; nearly the whole of the inferior lobe on the right side had undergone the same change as the circumscribed portions in the other lobes. This change consisted in a prodigious congestion of blood, which gave the dark colour and hardness; slices were quite diaphanous, and of a beautiful red."

ULCERATION OF THE WOMB.

The first case to be spoken of among those terminated since the last lecture, was one that proved fatal in the women's ward, a case of malignant ulcer of the womb. You see that the margin of the os uteri, and a great portion of the substance of the cervix, are either completely gone, or become a soft, tattered, black, offensive mass; the fundus of the uterus is rather enlarged and hardened. The effects of this disease present one of the most horrid spectacles in morbid anatomy; the disease has not extended to the bladder or rectum; and you observe that in the part immediately affected there is no hardness or new deposit, both which occur in scirrhus. The disease always begins I believe in the cervix, or, indeed, in the margin of the os uteri itself. On examination during life no induration or enlargement is found, and the patient complains rather of soreness than pain from the pressure of the finger; whereas in scirrhus and cancer a sharp pain is the consequence of pressure. Dr. Baillie has very accurately described this disease. He says, "The ulcer generally begins in the cervix uteri, and the

uterus is, at the same time, somewhat harder and larger than in the natural state; it does not, however, grow to any considerable size. The ulcer spreads from the cervix to the fundus uteri, and it is not unusual to see the greater part of the fundus destroyed by it, the rest being changed into a tattered ulcerated mass. The ulceration is not always confined to the uterus, it sometimes spreads into the neighbouring parts, as the vagina, the bladder, and the rectum, making communications between them, and producing dreadful havoc." He proceeds to say that it is generally considered as cancer, but that in consequence of the accurate observations of Dr. Adams in his Essay on Morbid Poisons, he has thought proper to separate them. Dr. W. Hunter, however, in his lectures, used to say that there were two kinds of cancers, the one corroding, without hardness, as seen in the lips, eyelids, and eye; the other with swelling, ulceration, and hardness, as seen in the breasts; and that both these kinds occurred in the uterus, so that he appeared to have distinguished the disease. Like cancer, this affection rarely attacks women before the middle period of life, and the present patient was forty years of age, but had had children. She was not admitted till the disease was very far advanced. She came into the hospital on the 21st of April, stating that she had been ill five months, that she had flooded all this time till the last fortnight, during which period the discharge had been only of a watery reddish fluid, and not blood. She was too weak even to sit up in bed, emaciated, of a dirty-white colour, like paste into which some charcoal powder has been mixed; the skin was dry; the pulse quick and feeble; she complained of nausea; great bearing down anteriorly and posteriorly; pain in the womb, loins, hips, groins, and thighs as low as the knees. The discharge from the vagina was exceedingly fœtid, and the fœtor was augmented by her inability properly to retain her fæces and urine, on account of the general irritation of the lower part of the pelvis. In scirrhus and cancer there is violent lancinating pain, and the health generally suffers more before equal devastation is produced. The indications in this case were, to support the patient's strength, lessen pain and irritation, and correct the fœtor of the discharge. For the first purpose she took two drachms of the subcarbonate of iron three times a day; was allowed meat, arrow-root, milk, porter, and wine; had fish whenever she desired, for sometimes her stomach loathed meat. For the second purpose two grains of the extractum stramonii, and afterwards three, were introduced into the vagina, at first every night, and afterwards twice, and even three times a day; a grain of the extract of belladonna was afterwards employed in the same way, when the stramonium seemed to fail of relieving her; but it did not answer any better. The solution of the chloruret of soda was continually applied for the third purpose, and it was found necessary to sprinkle levigated chalk around to suck up the urine, and preserve her as much as possible from excoriation. Latterly a diarrhœa came on, to check which an ounce and a half of infusum catechu compositum was given three times a day; of course all this was mere palliation, and I am sorry to say very poor palliation, so that she died exhausted on the sixth of the present month.

BRONCHITIS.

The second case which proved fatal this week, was one of bronchitis of long standing in an old man. There was nothing peculiar in it, and the body was buried without inspection being allowed.

There was another case of bronchitis of only a month's duration, and very slight, in which the only thing remarkable, was the offensive state of the expectoration; but with a blister, and five grains of the extractum hyoscyami three times a day, and confinement to the ward, he did very well, after being in the house three weeks.

PERICARDITIS.

A case of chronic pericarditis commencing during rheumatism, has also been presented. The patient, a female, was admitted April the 8th, aged 21, saying she had been ill three months. Her symptoms were, pain darting through the region of the heart to the left shoulder, down to the arm, and to the left scapula; tenderness about the region of the heart on pressure, palpitation, bellows sound at the action of the ventricle, loudest at the left half of the cardiac region; at the same time, and for some time before, pain and heat of the joints, sweating, and headach. When pericarditis lasts some weeks in this way, a ventricular bellows sound is generally heard, loudest in the left half of the cardiac region. I have seldom heard it during the acute stage of the disease; rarely, except the disease has existed for some little time, and it will often continue, or even increase, after the inflammatory symptoms have subsided. Without care it never declines, and then signs of hypertrophy of the left ventricle are almost sure to show themselves. After death, either disease of the aortic valves and constriction of the mouth of the aorta are discovered, or the right auricle is dilated and pressing upon the rising aorta, or the left ventricle is dilated, perhaps also hypertrophied, so that the mouth of the aorta, though unchanged, is no longer sufficiently large for the cavity from which

the blood flows through it. This patient was cupped over the region of the heart to twenty ounces; took two grains of calomel twice a day, and was put upon milk diet. On the 13th she was cupped again on the same place to the same amount. On the 23rd, the head required twelve leeches to the temples; on the 27th, the dose of calomel was increased to three grains; on the 11th of May, it was given only every other night, and in about a fortnight was omitted altogether. All this time the tenderness and pain in the region of the heart gradually subsided, and the bellows sound grew fainter and fainter, and the mouth became very gently affected. On the 25th of May, little seemed to remain but debility, and she took the mistura ferri compos. three times a day. On the 10th of this month she was well enough to leave the hospital. In her, the bellows sound was always increased by the recumbent posture. I believe I have remarked to you before, that in pericarditis, and in active rheumatism of the joints, local bleeding is far more useful than general, and far better borne.

HYDROCEPHALUS.

The third female case was that of a girl aged 12, who had signs of commencing acute hydrocephalus. She had been ill a month, and complained of violent headach, chiefly at the vertex; the pupils were large, though, from not knowing their natural state in her, it was impossible to say whether they were morbidly dilated; the head was hot; the temples throbbed; she vomited every thing; the pulse was very quick, and she was very thirsty. Acute hydrocephalus sometimes begins and destroys life in a few hours; sometimes it is several weeks in forming, and may be prevented by suitable measures; and upon the necessity of attending to the early symptoms of the disease, you cannot do better than read Dr. Yates's pamphlet on the subject. If measures were taken whenever the disease is threatened, however faint the suspicion of it, I have no doubt it may frequently, if not generally, be prevented; and it is better to use safe means unnecessarily now and then, than to allow the disease ever to occur when it is in our power to prevent it. On pressing the epigastrium and the rest of the abdomen, there was not the slightest tenderness, though in hydrocephalus acutus, arachnitis, meningitis, or whatever you please to call this inflammatory affection of the contents of the skull, some part of the abdomen is very commonly found tender, and in a state of inflammation; nor was there any particular constipation. I therefore concluded that the vomiting was solely a sympathetic effect of the state of the head; twelve leeches were applied to the temples; the head was kept wet with cold water; six grains of calomel were given every day, and followed by salts and senna when purging was not induced. The diet was merely barley-water and gruel. The leeches were applied again on the 24th and on the 25th. On the 28th the calomel was omitted; milk was added to her diet, and she was presented well the following week.

DROPSY.

The last case is one of general dropsy, acute, inflammatory, and cured by bleeding and purging. It was in a man aged 51, who had been ill only thirteen days, and whose disease arose, like every case of inflammatory dropsy which I recollect having seen, from refrigeration. He ascribed his complaint to drinking cold water while he was hot, and working on a stack of hot bark. This was quite sufficient in my mind to show the propriety of bleeding; but besides this, the epigastrium was tender, there was a slight degree of bronchitis, and the pulse was full and firm. He was bled to a pint, took an ounce of cream of tartar every day, followed by salts and senna when it did not effectually purge him, and he was discharged well on the 20th of May, three weeks from his admission.

LITHOTRITY.

CASE OF STONE IN THE BLADDER, ILLUSTRATING THE USE OF THE BRISE-COQUE.

Treated by BARON HEURTELOUP, D.M.P.

(Communicated by D. O. Edwards, Esq., Westminster Hospital.)

Mr. Sutcliffe, ætat. 55, two large ovoid flat stones; sound but contractile bladder, rendered dilatable by opium; employment of the perce-pierre to render the calculi friable; inconvenience of the use of this instrument on voluminous stones; employment of the brise-coque, rapid destruction of the stones; inconvenience of instruments having a calibre smaller than that of the urinary canal; cure.

MR. JOHN SUTCLIFFE, farmer and cotton-manufacturer, at Thortle Bowers, near Halifax, Yorkshire, about fifty-five years of age, of a sanguine temperament and good constitution, experienced in the spring of 1826, for the first time, that sensation which I have so often described at the end of the penis, and an acute pain in the perineum; a little time afterwards he perceived an irregularity in the manner of urining. If he mounted a horse, and ascended a steep hill, or if he took any unusual exercise, he sud-

denly became conscious of a desire of making water, which he was compelled immediately to obey, and frequently, after the bladder was emptied, he suffered a vivid pungent pain, more or less permanent, which irradiated through the whole length of the urethra.

After a year, these pains changed their character; that which was felt in the perineum ceased altogether, but an extremely vivid pain existed at about an inch from the extremity of the penis. This pain, which was almost continual, became occasionally lancinating, and was much augmented when the patient attempted to expel his urine. Protracted exercise was habitually followed by considerable hæmaturia. At other times the urine was clear, but deposited, after a few hours' standing, a quantity of white sediment. The symptoms became aggravated, the pains every day more acute, and accompanied by a continual desire of evacuating the bladder and rectum. At length, a dull pain in the region of the kidneys was added to the previous signs, and a sense of swelling in the thighs supervened.

His disease was first taken for a purely renal affection, and treated as such. Certain purgatives were administered, and afforded relief; but his sufferings returned suddenly. He consulted Mr. Sunderland, of Halifax, who, after having sounded him, detected a stone, and persuaded the patient to submit to an operation.

Mr. Sutcliffe, having become acquainted, through THE LANCET and other Medical Journals, of my arrival in London, determined to place himself under my care. Upon his arrival in the metropolis, his sufferings, although upon occasion sufficiently vivid, were generally lenient enough. His health was good. Catheterism enabled me to discover, in a bladder of large dimensions, well-formed and remarkably sensitive, two calculi, which, when methodically examined, appeared to be ovoid, flat, smooth, of moderate hardness, and as moveable as their size would permit.

Stones of this kind being susceptible of easy and speedy fracture by the system of instruments, which I have called "trois branches à virgule," I thought it right, notwithstanding the contractions of the bladder might in this patient be seriously considerable, to proceed without any preliminary preparation to the destruction of the stones, determining to comminute them as a finale with the brise-coque.

With this intention, and seeing the diameter of the urethra was considerable, I employed, in the attempt, an "instrument à virgule," of three and a half lines in diameter, which was the largest size I had then in my possession.

The bladder being filled with from 4 to 5 ounces of water, which was as much as its contractility would permit, I introduced the instrument with the greatest facility; but at the moment I prepared myself to open its branches and seize the stones, a smart contraction of the bladder quickly ejected the water which distended it, between the tube and the urethra.

I now endeavoured to fill the bladder a second time, by an injection through the instrument, but the water that I injected continued to escape, and I was compelled to postpone my intention till a future day.

Not having in my collection an "instrument à virgule" of a diameter sufficient exactly to fill the canal during the lithotritic process, I was obliged to have recourse to the "perce-pierre," to expedite the seizure of the stones; and, by means of a few perforations, to make them more susceptible of the action of the brise-coque.

After diminishing the irritability of the bladder, by exhibiting pills to the stomach, and narcotic enemata to the rectum, I proceeded to the new mode of destroying stones, to which circumstances had driven me.

During five several sittings, I drilled from twelve to fifteen perforations. After each essay, a considerable quantity of powder was discharged, but not a single fragment of any size. After a term, I thought the calculi sufficiently weakened by these perforations to be broken with facility. I made use of the brise-coque and very soon succeeded in reducing them to powder. After four applications of the brise-coque, each of which was followed by the expulsion of a considerable quantity of voluminous fragments, the bladder of Mr. Sutcliffe was relieved from the major part of the stone which it contained. So great was the quantity of detritus, that the fragments, when collected, and not taking into account the powder, filled a spoon of two inches in diameter by half an inch in depth.

Clinical Remarks.

This case is curious in several points of view. The size and number of the calculi, and the means employed for their abstraction from the bladder, are remarkable. Being forced, by circumstances, to abandon my intention of employing the most expeditious means of destruction, the "instrument à virgule," the numerous company of medical gentlemen who witnessed the proceedings, have seen how often, in this case, the "perce-pierre"* rendered our expedients illusory. When disposed, with a view to perforate the calculi by means of its drill, supported on a central stem, we have often seen this drill re-enter a hole made in a former séance,

* For an account of this instrument, see former papers.

and thus render useless, or nearly so, the efforts then made to attack the stone. In the first and second séance, its action was sufficiently energetic, and a great quantity of powder was ejaculated, but in the third and fourth, and above all in the fifth, its operation became much less effective from the tendency of the foret to enter the foramina already made.

It is nearly certain, that if I had only had this instrument to finish the operation with, and completely to reduce the fragments, instead of eight applications, I should have had occasion to resort to an infinitely greater number, probably twice as many. To be convinced of this, it is only necessary to submit a similar stone thus perforated, to the action of the perce-pierre out of the bladder. These calculi consisted of a base of lime, and were of middling hardness, and rendered but little fragile by the nature of its component salts. If uric acid calculi of a fine grain, and disposed, as they ordinarily are, in strata, are occasionally broken with difficulty, even when penetrated many times by the drill of the perce-pierre; it may be easily supposed that stones, such as existed in the present case, would be crushed with even more difficulty, since the strata are generally imperfectly formed and indistinct. These layers never separate, and the instrument may penetrate without producing any cracking.

The resistance offered by these consistent stones, with some reason may be compared to that presented by ramparts constructed of soft stones to the balls of the assailants: they may be penetrated in many holes, and yet the wall remain entire.

The present case affords proof of these assertions. After four sittings, no fragment indicated by its ejection the fracture of either of the hostile bodies. It was necessary for the more rapid progress of the opetion, to use the "virgule," and excavate the stone, but, unfortunately, the large size of the urethra required an instrument of greater calibre than any I possessed at that time.

I scarcely know whether it would not be better to attack small ovaloid stones at once with the brise-coque. It is probable, if I had done so in this instance, I should have succeeded, without losing time by the previous use of the perce-pierre. The brise-coque possesses so much power, that it would certainly have triumphed over these stones, even if they had not been previously weakened by perforations. Indeed, if I should again meet with a similar case, I should not hesitate in having immediate recourse to that powerful auxiliary.

It will, perhaps, be a matter of surprise, that the instrument employed at first, although it was of from three to four lines diameter, was not sufficiently large to distend the canal and prevent the escape of the water. When this takes place, it is impossible to proceed advantageously with the destruction of the stone, and, in fact, it would be imprudent to attempt it, for the contracted bladder would find itself in immediate contact with the branches of the pincer. Moreover, it is impossible where large stones exist, to make the necessary manœuvres for their capture, as such attempts always imply a sufficient space in the organ, to contain both the stone and the "pince" in action. The moment this is wanting, the instrument and the stone come into too close contact. It is true the seizure *may* be made, but it would be necessary to employ force. Lithotrity excludes every violent manœuvre which, perhaps, may enable the surgeon to command for a moment the obedience of the organ, but prevents him, by the irritation that it excites in the patient, from renewing the application of the instrument. It is a law of lithotrity, and one which ought not to be departed from, never to attempt the destruction of large stones in an empty bladder. When the water from any cause is found to escape, it behoves the surgeon to withdraw his instrument, and to postpone his efforts to a future day.

In general, when an instrument of a diameter proportionate to that of the canal is employed, the water does not escape between the urethra and the instrument, whatever may be the irritability of the bladder. It is also an important precept never to operate in a sensitive bladder with a small instrument. Great indeed is the error of those surgeons who regard the use of small instruments as an advantage, whatever may be the calibre of the canal through which they are to be introduced.

In the instance of Mr. Sutcliffe, which is not an exceptionable one, for there are many urethras as large, I introduced, with the greatest facility, a perce-pierre of four lines diameter. Notwithstanding the great volume of this instrument, we have seen that the water sometimes flowed out between it and the urethral canal. This circumstance, which I could not obviate, because I had not in my armoury an instrument of sufficient size, rendered the operation much longer than otherwise it need have been; for the water stealing away, during the process of searching and perforating, obliged me to withdraw the lithotrite much sooner than if that fluid had remained in the bladder.

It should have been observed, that amongst other difficulties, the patient presented that of an eminently contractile bladder, which I combated by the exhibition of opium in the shape of pill and draught, and likewise of glyster. I thus obtained all

the dilatation of the organ which was desirable and convenient for the destruction of the stones; but if I had to congratulate myself on this effect of the medicine, I ought to remark that it gave rise to many inconveniences, such as want of appetite, occasional nausea, and cephalalgia. I have sometimes dispensed with the use of this medicament, on the ground that the disturbances to which its administration gives rise, have been so far prolonged as to compel me to lengthen the interval between each séance. It is therefore necessary to be moderate in the use of opiates in these circumstances, for some people bear their use but badly. It is but just however to say, that there are others who experience all the happy sedative influences of this drug, without any inconvenience. The calm and tranquil state of the organ during the operative process, contributes much, as may easily be supposed, to its successful issue, and prevents the patient from being over-fatigued.

The cure was effected at Mr. Powell's, in Chiswell Street, and in the presence of many of the most eminent surgeons of this metropolis, amongst whom may be mentioned particularly Mr. Joshua Brookes.

HYDROPHOBIA.

At a late meeting of the Académie Royale de Médecine, M. Ferrus reported the following cases of hydrophobia, after the bites of a wolf. On the 29th of September, 1829, a rabid she-wolf attacked several persons, six of whom were bitten; the first was a robust man, of about 40 years of age, who for a considerable time fought with the animal; he received four bites in the face, fourteen on the right forearm and left wrist, five on the fingers, and five on the right thigh. Most of the wounds were inflicted on places not covered by any garment; the wounds were cauterized two hours after the accident, and during the following days, the muriate of antimony was applied to them. On the 25th of October they were all healed, with the exception of one on the thigh which was deeper than the others, and at that time became erysipelatous; a blister was applied to the wound and the surrounding skin, but without any effect; the scars of the other wounds at the same time swelled, and became of a livid colour; respiration was laborious, and deglutition difficult; the patient complained of anxiety and constriction in the chest, and of heat in the larynx and œsophagus; had dread of water, and frequent attacks of furious delirium. These symptoms continued four days, and on the fifth terminated in death under violent convulsions, and after a slight bleeding from the nose. The second person was a female, of 70 years of age; the wounds were neither so numerous nor so deep as in the former case, and were cauterized soon after the infliction; yet the patient died of hydrophobia, three months and twenty days after the accident. The third individual was a young man of fifteen, of lively temperament and great sensibility; the wounds, which were very deep, and mostly in the face, were cauterized an hour after the accident, and during the following days repeatedly washed with the chloruret of soda; at the same time, mercurial frictions were made, and a favourable termination was anticipated, when on the thirteenth day hydrophobia broke out and proved fatal in four days. A man, of 65 years of age, was bitten in the same way by the same animal, though at another place, two miles distance from the first; after a week, during which he had no medical assistance, the wounds were cauterized; but after two months, hydrophobic symptoms appeared, and though they were rather slight, and more like tetanus than real hydrophobia, they proved fatal after a few days. Two other persons who were wounded, and in whom the same treatment was pursued as in the others, happily escaped. The rabid animal was killed on the same day; on dissection, nothing was found that might be considered as indicative of rabies, or even of disease in general.

A long discussion took place after this report. M. Rochoux denied that mercurial frictions were of any use as prophylactics; and requested the committee in whose name the above report was made, to urge the application of the actual cautery, as the only preventive of hydrophobia. M. Moreau was of the same opinion as M. Rochoux with respect to mercurial frictions, but gave the preference to a liquid caustic, in order to be sure that every part of the wound had been touched; he also recommended the previous enlargement of the wound; the lotions, with the solution of the chloruret of soda, he considered useful, in order to keep the wounds open, in which state they ought to be continued for forty days.* M. Girard stated that he invariably employs the actual cautery, after having freely enlarged the wounds. M. Piorry advised not to neglect the application of cupping-glasses over the

* At the surgical clinic of Dr. von Graafe, at Berlin, the treatment of wounds from rabid animals, consists in the application of the white-hot iron; the internal administration of calomel and belladonna, and after the eschar has come away, the use of the red precipitate ointment with cantharides powder, in order to keep the wound open, which it usually is for four or five months.—*Journ. Chir. u. Augenheilc.*

wound, the ligature of the wounded limb, etc. MM. Bally and Amussat proposed, that in the published report the public be informed that there is no danger in assisting the unfortunate persons who are affected with hydrophobia, and that the saliva with which they commonly cover every thing around them, does not communicate the disease when applied to the skin.

HOTEL-DIEU.

SINGULAR CASE OF DISEASED BRAIN.

A MAN, 42 years of age, died on the 13th of April, two days after his admission, under symptoms of disease of the heart. He had from his infancy been affected with incomplete hemiplegia of the right side; the paralysed limbs were atrophic, and the phalanges of the fingers dislocated backwards; the intellectual faculties, and the functions of the external senses, were not in the least impaired. On post-mortem examination, the lower extremities were found infiltrated; the pleura and peritoneum contained a considerable quantity of serum, and the left ventricle of the heart was hypertrophied. The most remarkable alteration was, however, observed in the brain; the left half of the skull was twice as thick as the right, and the left hemisphere of the brain was accordingly much depressed; the right anterior lobe was larger than the left by half an inch; the convolutions of the left hemisphere were attenuated, flattened, of unusual consistence, and white colour; the left lateral ventricle contained a large quantity of serum; its parietes were so thin as to resemble a membrane; the left thalamus opticus, corpus striatum, crus cerebri, and the left portion of the pons varolii, were atrophic. The alteration of the cerebellum was the inverse of that of the brain, its right hemisphere being atrophic, and smaller by a third than the left. This remarkable case having been read at the Académie Royale de Médecine, by M. Guéneau de Mussy, under whose care the patient had been at the Hôtel-Dieu, M. Amussat remarked, that he had observed several cases of atrophy of one of the hemispheres, and that in all of them the opposite half of the cerebellum had been atrophic. M. Ferrus made the same remark; in some of his cases, however, the same side of the cerebellum had been atrophic, and most of the patients had been idiots; one of them, however, in whom the left hemisphere was found destroyed, and replaced by a small quantity of pulpous matter (détruit et remplacé par une petite quantité de matière pulpeuse), had up to the period of his death been in the full enjoyment of his senses and mental faculties.

HOPITAL DE LA CHARITE.

PARTIAL EXCISION OF THE LOWER JAW-BONE.

—— LOUZEAU, ætat. 27, of a good constitution, was admitted on the 1st of May. She stated, that nine years ago, after suffering for some time from violent toothach, the last molar tooth but one on the left side of the lower jaw had fallen out, and that a fungous excrescence had shot up from the socket; the growth of this fungus was not accompanied by any pain, but its further enlargement produced the loss of all the other teeth on that side of the lower jaw. Within the last six months the tumour had very rapidly increased in size, and, at the time of her admission, extended from the last molar to the incisor teeth, forming a large globular prominence, the centre of which coincided with that of the bone; it was of reddish colour and uneven surface; the integuments which covered it were healthy; it had of late become the seat of lancinating pain. The incisor teeth were loose; the last molar tooth alone was firmly fixed in its socket; all the other teeth had fallen out. Mastication on the right side, and speech, were not much impeded. The general health of the patient was not at all altered; the cervical glands were not swelled. On the 8th of May, M. Roux performed the following operation:—A semilunar incision was made about eight lines from the right angle of the mouth towards the left ear, and three ligatures having been applied, the flap dissected upwards; the insertions of the right digastricus, mylohyoid, genioglossus, and geniohyoid muscles, were thus laid bare, and the latter having been divided from below upwards, the lower jaw-bone was sawn through in its median line, the incisor teeth having been previously extracted. Unfortunately, the saw broke* during this part of the operation, and the division of the jaw was completed by the introduction of a spatula. The tumour was now laid bare at its posterior portion, and after the application of three ligatures, divided immediately before the molar tooth, which appeared to be perfectly healthy. The portion of the lower jaw which was thus removed, was of the size of a hen's egg. The operation lasted no more than twenty minutes, and did not seem to cause much pain, though, indeed, the blood which constantly flowed into the patient's mouth, prevented her from uttering any

* This is the second time, says the reporter of the *Lancette Française*, that we have seen the same accident happen to M. ROUX.

complaints. A few more ligatures having been placed at the bottom of the wound, it was closed, and next united by means of seven sutures. On the 9th, the patient complained of violent pain in the throat, was rather feverish, and had passed a restless night. On the 10th, the dressings were removed for the first time; the wound looked very favourably; the pain and fever continued, though not with much intensity. On the following day the left side of the face was much swelled; the sutures were removed on the fourth day after the operation, and the wound found to have united to a great extent. On the fifth day, the patient was taken with labour pains, and delivered of a dead fœtus of about five months. Her pregnancy had of course not at all been suspected, not even by the patient, who had stated that she had not menstruated since her last accouchment, which had taken place fifteen months ago. For some days after this accident, nothing unfavourable occurred; on the third day, however (the eighth after the operation), the lochial discharge was suppressed, the abdomen became tender, the pulse small and frequent, &c., and the patient died on the eighteenth.

On dissection, the tumour proved to be of a sarcomatous nature, and appeared to have originated at the surface of the bone, the substance of which was altered in some points only; this alteration, however, seemed to extend further backwards, so that in order to prevent the recurrence of the disease, it would have been necessary to remove another portion of the jaw-bone, or to exarticulate the remaining part of it.—*Lanc. Franc.*

POLYPUS OF THE UTERUS, TREATED BY THE LIGATURE, FOLLOWED BY FATAL PERITONITIS.

A female, 40 years of age, was admitted on account of a polypous tumour protruding into the vagina. A ligature was applied by means of Desault's "serre nœud;" the operation was performed by M. Roux, and exhibited nothing of interest; the patient appeared to go on very well, when on the fourth day peritonitis suddenly came on, and in spite of the application of leeches proved fatal within twenty-four hours. On examination the uterus was found hypertrophied; on its left side a fibrous tumour had formed, the substance of which appeared to be continuous with that of the polypus: the latter had been almost entirely separated by the ligature. The right ovary contained some encysted tumours; the peritoneum in the neighbourhood of the uterus exhibited distinct traces of inflammation.

HOPITAL ST. ANTOINE.

TUMOUR IN THE HYPOGASTRIC REGION, TERMINATING IN AN ABSCESS AND PURULENT DISCHARGE THROUGH THE URETHRA.

A woman, ætat. 31, was admitted on the 16th of January, on the fourth day of violent peritonitis. The abdomen was much swelled, especially in the hypogastric region, where a hard, circumscribed tumour was felt, which, however, could not be closely examined, on account of the extreme tenderness of the part; the bladder did not contain much urine, as was ascertained by the catheter. Under the free use of the lancet and the application of eighty leeches, within a few days the pain and swelling greatly subsided, except at the epigastric region, where the tumour was now more distinctly felt than before; it was rather hard and painful, and the patient complained of lancinating pain in the loins and thighs, tenesmus, and the sensation of heat and weight in the vagina. Appl. hirud. vjii vulvæ et catapl. emoll. abdom. No remission took place in the symptoms. Menstruation, which hitherto had been very regular, did not come on at the proper time; the tumour, which for some time had remained stationary, became larger, more diffuse, and sometimes extremely painful, so as to require the repeated application of leeches; the urine was quite natural, but the patient complained of pain at the end of making water; the motions were rather loose, and passed with much pain. She was ordered to use the hip-bath and an injection of starch, with a small quantity of laudanum. Towards the middle of February the patient had some attacks of ague, which was readily suppressed by the sulphate of quinine; the tumour still increased in size. At the beginning of March, some symptoms of hectic fever appeared to accede; the patient perspired profusely at night, and was obliged to make water very often. The tumour slightly diminished in size, but caused the sensation of a heavy weight in the hypogastric and pelvic region; the stools were passed with much tenesmus. On a closer examination, the urine was found to contain a considerable quantity of thick pus, of greyish-yellow colour, and very offensive smell; the urine itself was rather high-coloured. This purulent discharge in the urine continued till the end of March, when the tumour, which had considerably diminished in size, gradually became more prominent, and ultimately exhibited distinct fluctuation. On the 28th of March a puncture was made, and about four ounces of yellowish-green pus evacuated; a tent was placed in the wound, which, up to the 10th of April, continued to discharge puriform matter; after this time it secreted a serous fluid, and healed

up on the 21st of April. On the 10th of May, the health of the patient had much improved; she was free from pain, and the tumour in the hypogastric region had almost wholly disappeared; the urine was perfectly healthy.—*Lanc. Franç.*

SINGULAR CASE OF AN OSSEOUS CONCRETION BETWEEN THE MUSCLES OF THE UPPER ARM.

W. S., ætat. 22, a soldier, a very robust man, felt, after a very long and fatiguing musket drill, a violent pain, which he, however, neglected, until it became so violent as greatly to impair the use of the arm. He, however, only used spirituous lotions, and still continued his exercise, until he observed a small tumour at the upper part of the arm, which gradually increased in size, and caused such violent pain, as to make him incapable of moving the limb. He now applied to the surgeon of the regiment, Dr. Kuhn, of Potsdam, who found a hard, somewhat moveable tumour, at the anterior margin of the deltoid, and apparently over the insertion of the great pectoral muscle; it was not adherent to the skin, and was about four inches in length, and two in breadth; its long diameter was parallel to the humerus; its upper portion was about an inch distant from the humeral end of the clavicle; the lower seemed to adhere to the exterior surface of the biceps muscle; its edges were irregular, and in some places sharp. After having observed the patient for a few days, Dr. K. performed the following operation: an incision of five inches length having been made through the integuments, the osseous concretion was laid bare, and its upper portion easily detached from the subjacent parts, to which it adhered merely by loose cellular tissue; one part of it, however, was lying very close to the capsule, and it required great caution to detach it without wounding the joint. Its internal margin was closely adherent to the pectoral muscle, and the lower part was fixed by tendinous fascicles to the aponeurotic fascia over the biceps; at the posterior surface there were the two pedicles by which the osseous growth appeared to have been nourished; and an aperture for a nutrient vessel. The hæmorrhage was but slight, and did not require the ligature of any vessel. The bone was found to be four inches in length, and one and three quarters in breadth; it weighed one ounce, and was of a very irregular form; in some places the edges were sharply pointed. The upper part of it was covered with a sort of periosteum, which did not exist at the lower, where the surface was rough, porous, and like that of a carious bone. The wound had completely healed within about four weeks. —*Journ. Chir u. Augenl.*

THE LANCET.

London, Saturday, June 26th, 1830.

THE KING.

The exposure, comparatively partial as it is, of the extraordinary, unconstitutional, and dangerous proceedings within the Castle at Windsor, has produced much rational discussion, many ridiculous conjectures, and a great number of malignant contradictions. Upon the whole, however, the feeling so strongly displayed, is highly creditable to the taste and judgment of the nation. The announcements concerning the arrangements within the palace, have been of so peculiar, indeed of so astounding and unnatural a character, that the most constant observers of our general accuracy, and of our scrupulous endeavours to be minutely correct upon all occasions, might well have rejected such strange statements as unworthy of credit, or even of the least attention. Fully aware of the difficulties of the contest in which we were about to engage, and equally apprised of the almost superhuman agency that would be set to work against us, we did not take up the pen hastily, nor adopt our position without mature and deliberate investigation. It must be recollected, that the meagre, ambiguous, illiterate bulletins, had been issued nearly a month before we hazarded a single word upon the subject of the King's illness; and these documents had proved so exceedingly unsatisfactory, that the public mind was already prepared for the disclosures we have recently made. It was universally demanded, why the physicians were so uniformly silent relative to the nature of his Majesty's disease, and no explanation was afforded, until it was stated in this journal, that *one* of the two physicians was in the daily habit of signing the bulletins, without having been consulted by the royal patient. If the communication of this fact, excited in the

public mind the greatest alarm for the safety of the Royal Sufferer,—for few persons could discover the utility of such bulletin-signing, "invisible," medical attendance,—it was far surpassed by the apprehensions of the magician and his squad of "invisibles" for their own safety, these worthies well knowing they had something to dread beyond mere exposure. Writhing under the sentence of condemnation so generally passed upon their conduct, and dreading still worse consequences, the "invisibles" have directed the full torrent of the polluted streams which are at their command, to flow over and against "that damned spot," upon which is stamped the indubitable evidence of their misdeeds; but not a word of the charges against them has yet been disproved, nor have they effaced a single letter of the accusations. It cannot be forgotten, that on one occasion, when we said that the King was in a state of great danger, the bulletins were silent upon every symptom which could create alarm, and several of the daily journals, in placing reliance upon those documents, were at the same time speaking of his Majesty's illness as of a "past event." We stated that his Majesty had been subjected to the dangerous operation of puncturing, without there having been a previous consultation with the sergeant-surgeon;—that his legs had been scarified;—that his disease was attended with general effusion of water, and that, *cæteris paribus*, there was not a case of recovery from it upon record;—that the King had no wish to conceal from the public a knowledge of his real situation;—that his night-watch consisted of Sir W. Knighton and Sir W. Waller, the former late an accoucheur, and the latter late an oculist;—that the paragraphs which appear in the *Court Circular* are concocted in the Castle under "invisible" influence; that this paper falsely stated in January last, that the King was "walking in the corridor" at the time his Majesty was confined to his room, and undergoing a severe antiphlogistic regimen;—that the King's illness commenced in January, although no bulletin was issued until April;—that the bulletins had been signed for at least seventeen days, by a physician who had not once been consulted by his Majesty during that time;—and we last week spoke of the diminished swelling, of the harassing cough, of the free expectoration of mucus, and of the attendance of Mr. Nussey the apothecary.

Now we appeal to our readers, to the candid and intelligent portion of the community, and ask whether any contradiction, worthy of the slightest credit, has been offered to either of these statements. On the contrary, the "invisibles," adopting the example of some other culprits, have chosen rather to confess, because they have found that it was no longer possible to conceal. The *Court Circular* is now in the *habit* of partially confirming our statements; and the following article, *written in the palace* on Monday, June 21st, under immediate "invisible" influence, and inserted in several of the newspapers, confirmed nearly every thing we had advanced on the subject of the "internal arrangements."

"Windsor, June 21.

"The only physicians attendant on his Majesty are Sir H. Halford and Sir M. Tierney, and one or other of them is constantly in the King's room during the day, and sleeps in an apartment so contiguous as to be ready at a moment's notice.

"Mr. Brodie and Mr. O'Reilly are the only surgeons employed, and visit his Majesty daily at nine in the evening and seven in the morning, and after this latter consultation the bulletin is written and signed by the two physicians.

"The Bishop of Chichester reads prayers every day in his Majesty's apartment. Sir Wm. Knighton and Sir Wathen Waller are one or other constantly with his Majesty during the day, and sit up with him alternately every night.

"Sir William Keppel, Sir A. Barnard, Sir Frederick Watson, and Colonel Thornton, are some of them constantly in waiting, to introduce those members of the Royal Family, or Ministers of State, who may be permitted to pay their duty to his Majesty, but these gentlemen never enter the royal apartment unless commanded.

"Mr. Nussey, the King's apothecary, has twice been called in to assist in sitting up at night, but has nothing to do with the medical arrangements respecting his Majesty."

This article, we repeat, was written in the Palace, and we ought to thank the "invisible" for so corroborative a confession. Nor is this all; for we had no sooner announced in THE LANCET, that Mr. Nussey was in attendance upon his Majesty, than the same thing was acknowledged in the *Court Circular*, — official announcement, as usual, following intelligence that had been communicated to the public from other quarters. When THE LANCET reached the Castle on Saturday morning last, the notice of Mr. Nussey's visit to his Majesty caused the greatest consternation and confusion. The sudden appearance of an "eagle in a dove-cote" could not have been productive of greater consternation, dismay, and disorder; and after many weighty and profound consultations, it was resolved by the committee of "invisibles," that the following notice or "contradiction" should be inserted in the paper, called the *Windsor Express*.

"It is unnecessary to give a formal contradiction to all the contradictory and generally erroneous reports on the subject with which the public prints are now teeming. We quote the following passage, however, from an article in to-day's LANCET, which contains, among a vast deal of absolute invention and absurdity, something like an approximation to truth:—

"'During his Majesty's recent very severe and alarming attack, Mr. Nussey, the apothecary of Cleveland Row, was sent for, and to the diuretics and expectorants prescribed by this gentleman, is attributed the present alleviation of his Majesty's sufferings. Mr. Nussey has been the King's town apothecary for many years past, and is well acquainted with the peculiarities of his Majesty's constitution.'

"So far as relates to the circumstance of Mr. Nussey having been down to take his turn of attendance on his Majesty is perfectly true, but as regards the statement of 'the diuretics and expectorants prescribed by this gentleman,' the story is wholly unfounded. Every body knows, that in cases of such high national import, the task of prescribing does not usually devolve upon the apothecary, however great a favourite he may have the honour to be, but is commonly intrusted to, and exercised by the physician alone."

Here it is admitted upon "invisible" authority, that Mr. Nussey has "taken his turn of attendance upon his Majesty;" but the reader will see that it is denied in terms the most peremptory, that Mr. Nussey has *prescribed* for the King. Hence, we suppose, this gentleman did little more than recommend, *orally*, the diuretics and expectorants which proved of so much service to the Royal Sufferer, and thus the medicines, as in thousands of other instances, were *selected* by the APOTHECARY, while the prescriptions were in the *hand-writing* of the *physicians*—the signers of the bulletins. "In cases of such high national import," says the "invisible" author, "the task of prescribing does not usually devolve upon the *apothecary*, however great a favourite he may happen to be, but is commonly intrusted to, and exercised by, the physician alone." By the physician *alone*, sure enough, when only one of the bulletin-signers was consulted by his Majesty for nearly three weeks! From the language of this writer, we are clearly to infer, indeed we are told so in direct terms, that however great a favourite "the apothecary may be," he cannot prescribe for the King, as that task is intrusted to the physician *alone*. After this impudent *exposé*, can any one be surprised that such an eminent and spirited practitioner as Sir Astley Cooper has not been consulted. *He* would not bend and place himself beneath the feet of individuals, whom, in all cases, whether medical or surgical, his great professional knowledge must entitle him to direct and command. "Commonly *intrusted to*?" By whom "intrusted to?" Not by the King, because his Majesty cannot have "his apothecary to prescribe, however great a favourite he may be." If there be *not* "invisible" influence in Windsor Castle, we can only say that appearances are very

deceitful; but the bulletins are sufficient. We, however, combine with a large portion of the public, in hoping that his Majesty will not become the victim of "invisible" medical etiquette.

In discussing this subject, we have all along been most anxious to communicate only such facts as we have firmly believed to be true. Many circumstances that have been communicated to us, we have refrained from even alluding to; but an exposure of an astounding nature must, we suspect, one day come before the public. The following are the bulletins that have been issued during the past week. These documents really become more and more unintelligible, and are entirely beneath criticism.

"Windsor Castle, June 18.

"The King slept at intervals during the night; in other respects his Majesty remains in the same state."

"Windsor Castle, June 19.

"The King has not slept well. His Majesty has found his respiration more difficult from time to time in the night."

"Windsor Castle, June 20.

"The King's rest has been interrupted by cough, with expectoration during the night. His Majesty complains less, however, this morning."

"Windsor Castle, June 21.

"The King's rest has again been broken by the cough and expectoration. His Majesty feels languid this morning."

"Windsor Castle, June 22.

"The King has passed a good night. His Majesty's cough and expectoration continue."

"Windsor Castle, June 23.

"The King is still troubled by his cough, but it has not interrupted his rest; and his Majesty awoke refreshed this morning."

"Windsor Castle, June 24.

"The King's cough continues, with considerable expectoration. His Majesty has slept at intervals in the night, but complains of great languor to-day."

His Majesty, we regret to say, is in a much more enfeebled and languid condition than when our last number was sent to press. He is reduced so much, that he even appears to be in a state of emaciation. His sleep is very frequently disturbed by the cough, and puriform matter still continues to be discharged from the mucous surface of the air passages. His Majesty's appetite is much impaired; the medicines mentioned in our last, have been continued with a few trifling alterations. It is thought by the best informed on the subject, that the puriform secretion is the result of an arthritic inflammation of the mucous membrane of the lungs,—a spontaneous effort of nature to relieve the system from some more serious effect of a gouty disposition.

A MEETING of British naturalists in the northern metropolis, is spoken of as likely to take place during the ensuing season. The proposal, we understand, originated with Dr. Greville, Dr. Graham, Mr. T. Wilson, and other "illuminati" of Modern Athens, and has received the sanction of Mr. Jamieson, who, it appears, has consented to accommodate the learned visitors with the use of the University Museum apartments.

We need scarcely inform our readers, that the idea of a general convocation of the cultivators of science, is not a novelty. The proposition has for some time back been annually reduced to practice among the philosophers of Germany, and the present is an attempt to imitate their laudable example. The contemplation of assemblies of this kind naturally prompts a question as to their practicability, their utility, and their expediency. Before offering an observation or two on each of these topics, we will admit that the scheme is highly feasible and praiseworthy, and deserves the co-operation of every scientific individual in the empire, and of those persons at the head of that portion of the press which is more especially devoted to the advancement and diffusion of knowledge. Imagination, indeed, can scarcely picture a more delightful scene than that of an assembly of men of great talents, congenial pursuits, and ardent devotion to the discovery of truth, for the purposes of social intercourse, the mutual communication of new facts, and the suggestion of plans

by which their common objects would be more effectually accomplished. Such a scene might be expected to present somewhat of the primeval purity and disinterestedness of the philosophers of by-gone days, unpolluted by the cares and motives which distract and agitate this sordid, plodding, age. From such meetings of the votaries of natural science, fancy fondly excludes the cabals of politicians, and the machinations of sectarists; it paints them with the attributes of golden times, and assimilates them with the spiritualised communions of the great and good, as drawn by the pencil of the poet, in the Elysian Fields. But, alas! such reveries, however pleasing to the mind, are never to be realised, and can only "*look* green," like the bowers of Eden, in Milton's verse. First, we doubt much if a meeting corresponding with the dignity of its objects, and the anticipations of its promoters, could be collected from amongst the scanty number of British naturalists; and, in the second place, we can scarcely indulge the presumptive hope, that, if assembled, they would manifest that cordiality of feeling and harmony of purpose, which alone would become themselves and the occasion. There are not, perhaps, in the whole British islands, two dozen individuals, whose time is exclusively devoted to the cultivation of natural science; and even among these, it is well known, that the greatest difference of opinion, and the fiercest clashing of interests, prevail. Our aristocracy, among whom it might be expected that such men might be found, dispose of their time in the fashionable dissipation of "hells," in wringing high rents from their oppressed tenantry at home, or in the voluptuous enjoyment of the luxuries furnished by the arts and the climate of a foreign country. They will be found revelling in the picturesque sensuality of some sheltered valley, knocking their heads against the skies on the summit of some mountain of the Continent, or plunged deeply in the mire of party politics at home; engaged, in short, in any avocation but that which befits their station in society. On the other hand, those who may be considered as the cultivators of science in Great Britain, follow it as a trade; and have neither the inclination nor the leisure to visit such meetings as are proposed. The spirit of venality and traffic, in fact, has found its way into the speculations of this class of individuals, as extensively as into the mercantile department of British society. The physician has his patients to claim his time, and reward his assiduities; the botanist has his pupils to instruct, or profitable popular lectures to deliver; the chemist has his analyses and his avocations, which are equally infected with the ungodly love of gain; and if he hit on a discovery which promises to enrich him by its sale, prefers locking up his invention in a "patent," to its promulgation for the common good. Philosophers must now-a-days be at their posts like common men, and make the most of their talents, or others will be found to reap the harvest. In fact, the overworking and mercenary spirit of the day, is anything but favourable to the exhibition of "Della-cruscan" associations; and even if such an union of the "lights of the age" were really practicable, we do not see what great advantage could be derived from the combination, beyond that which is already effected by their isolated exertions. The history of science informs us, that it was not amid the glare of learned assemblies that the greatest discoveries have been conceived, nor in the debates of pseudo-philosophers that they were promulgated, but in the seclusion of studious meditation, by the wasting vapours of the lamp and the laboratory. Besides, the exertions of the press have, in a great measure, superseded the necessity of convocations of this kind. If men have any thing of real value to communicate to the world, the press is ever ready to reward and promote its diffusion.

In stating thus unreservedly our opinion

of the difficulties attending the organization of such meetings, and the contingencies which are thus likely to obstruct them, we by no means wish to disparage the present attempt, for we consider it highly deserving of support, and commendable in its promoters. We are too well aware, however, of the spirit by which our learned men, the greater part of whose leisure is devoted to the anonymous abuse and degradation of their brethren, are actuated, to expect much from their coalition; and it would be but trifling with an important and really laudable design, to conceal our apprehension of its failure. To ensure success, however, we conceive the meetings should not be exclusively confined to Edinburgh, but held annually in succession in the three great capitals of the empire; for London and Dublin can furnish as many naturalists, more materials, and equal accommodation for such purposes, as the capital of Caledonia.

UNIVERSITY OF LONDON.

A SPECIAL general meeting of the proprietors of this Institution, to be held at the University, is appointed for this day, Saturday, (June 26,) at two o'clock in the afternoon, precisely. The requisition to the Council was signed by twenty-five proprietors, and bore the names of Lords Althorp, Milton, Ebrington, Nugent, and of Messrs. Hume, Marshall, Hobhouse, &c. There seem to exist certain irreconcileable differences between the Warden, Mr. Horner, and certain eight or nine of the professors and the bones of contention, though small, appear to be quite indigestible. It is the object of the professors to abolish the office of Warden, and consequently, to oust Mr. Horner. On the other hand, it is the object of another party, the Warden's friends, to get Mr. Horner appointed Principal of the University, and upon these grounds the interference of the proprietors has been called for. From the names of the requisitionists, we look forward with confidence to the result of their deliberations, and we cannot for a moment, suppose that these enlightened gentlemen will fail to see the propriety of aiding the Council in enforcing obedience to the established and recognised laws of the Institution. Nine of the professors are acting in a body; their hostility to the Warden has assumed the appearance of a cabal; and we cannot say that even their addresses to the Council, are couched in respectful language. If the proprietors should omit to afford in this affair the most unequivocal support to the Council, the fate of the Institution will be decided. Many of the complaints against the Warden are frivolous and childish in the extreme. The medical school has already proved singularly successful, and it only wants the appendage of a moderately-sized hospital to render it the first establishment of the kind in Europe. If any person object to the erection of an hospital in the immediate vicinity of the University, the Council and proprietors may truly look upon that man, as either a foolish, or an interested enemy to the medical department of the Institution.

The Influence of Climate in the prevention and cure of Chronic Diseases, more particularly of the Chest and Digestive Organs, comprising an account of the principal places resorted to by Invalids in England, South of Europe, &c.; a comparative view of their respective merits in particular diseases, &c. By JAMES CLARK, M.D., &c. &c. Second Edition. London. T. and G. Underwood. 1830. 8vo. pp. 400.

If we consider the ignorance and false views which have prevailed, not only among invalids but even among medical men, as to the influence of climate on disease, as to the real differences between certain spots generally regarded as salutary, and the particular diseases in which each spot is beneficial, if we recollect how many unfortunate patients to whom a change of climate in reality offered not the slightest chance of recovery have been

sent abroad,—to die, we cannot fail to admit the necessity of such a work as that which is now under our consideration, and in which Dr. Clark has supplied the deficiency in an able and satisfactory manner. He has produced a book replete with information, valuable alike to the invalid, and to the medical practitioner. The most important circumstances in the climate of numerous places in the south and south-west of England, in the south of France, in Italy, in the Atlantic Islands, and the West Indies, are described with great clearness and accuracy, conveying much information as to the soil, temperature, winds, atmospheric moisture, &c., and the particular diseases, and time of year in which each place, or different situations in each place, may be expected to prove beneficial. The diseases themselves also are especially and separately considered in the second part of the book, where the author, in his observtions on their nature, exciting causes, and prophylactic treatment, has displayed much experience, judgment, and acuteness.

A work of this kind will not admit of analysis, and as, on the one hand, we have found no errors to be corrected, nor any ill-founded or false opinions to be combated, so also it is difficult for us to point out any particular part as more excellent, or more worthy of attention than the rest. A large proportion of the places noticed, have been visited, and their peculiarities observed and studied, by the author himself. The statements relative to the others rest on the authority of medical gentlemen who have resided for considerable periods in the respective districts. Little or nothing is taken from already published works, and we are induced to think that nothing has been put down, of the correctness of which the author was not well convinced. The following extract will serve as a fair specimen of the spirit and sound sense in which the whole has been written. It is taken from the introductory chapter to the second part:—

"Too much is generally expected from the simple change of climate. From the moment the invalid has decided upon making such a change his hopes are often solely fixed upon it, while other circumstances not less conducive or necessary to his recovery are considered of secondary importance, and are sometimes totally neglected. Nor is this fault always confined to the patient; his medical adviser frequently falls into the same error, and it is not difficult to acccount for this. The cases hitherto sent abroad have been, for the most part, consumptive or chronic diseases of long standing, in which the ordinary resources of our art have usually been exerted in vain, before such a measure is recommended. Therefore, when change of climate is determined upon, the physician as well as the patient is disposed to look upon it as the sole remedy. The former generally advises all medicines to be laid aside except such as are requisite to keep the bowels regular; and with this counsel he resigns the patient to his fate, encouraging him to place his confidence in change of air, of scene, &c., and in these alone.

"Such, generally speaking, is the sum of medical advice with which I have found most invalids sent abroad. And as I have witnessed, on a pretty extensive scale, the injury arising from this kind of over confidence in the unaided effects of climate, and the consequent neglect of other things of no less importance, I particularly request the attention of invalids (and I hope I may be allowed to add, of physicians), to the following remarks:—

"In the first place, I would strongly advise every person who goes abroad for the recovery of his health, whatever may be his disease, or to whatever climate he may go, to consider the change as merely placing him in a situation the most favourable for the removal of his disease, and to bear constantly in mind that the beneficial influence of travelling, of sailing, and of climate, requires to be aided by such a regimen and mode of living, and by such remedial measures, as would have been requisite in his case, had he remained in his own country. All the circumstances requiring attention from the invalid at home, require to be equally attended to when he is abroad. The necessity for such attention may differ somewhat in degree, but that is all. The same care as to exercise, regimen, &c., that would have been necessary at home will be equally so abroad. If in some things greater latitude may be permitted, others will demand even a more rigid attention. It is, in truth, only by a due regard to all these circumstances that the powers of the constitution can be enabled to remove or even materially alleviate a disease of long standing even in the best possible climate."

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ON TYPHUS FEVER,

AND ITS TREATMENT BY ALKALIES.

By PAUL SLADE KNIGHT, M.D.

In September last I published a letter in THE LANCET, expressive of the great satisfaction I derived from a lecture on typhus fever by Dr. Clanny; and at the same time, I stated that "I had also deviated from the generally adopted methods of treating this *chief* of diseases, and that I would take the earliest opportunity to submit the results to the public." "The Durham County Advertiser" of the 12th instant having been kindly sent to me by some unknown hand, for which however I am much obliged, I see in it a high and just tribute paid to the very valuable researches of Dr. Clanny and also to Dr. Stevens, who, I learn, has, subsequently to my observations on Dr. Clanny's lecture, read a paper on the subject before the Royal College of Physicians, and I therefore consider that the individual who has sent me the Durham paper, has done it to prompt me to perform my promise. In obedience to this call, although the opportunity alluded to has not arrived, I beg to make public the following facts relative to four cases of typhus, two taken promiscuously, and two for an especial purpose, and this I do with the more confidence, as I find myself supported by Doctors Clanny and Stevens. In the letter before alluded to, I stated "I thought I had observed that certain medicines exercise a very beneficial influence in the cure of insanity by their action on the stomach and head, and therefore since my residence in this place, I proceeded to ascertain its effects on *headachs generally* as they occur in the sane; the effects emboldened me to adopt it first in mental irritation, and ultimately in typhus fever; the result has exceeded my sanguine expectations." Since this was written, Mr. Editor, I have lost no opportunity to prosecute the important and interesting inquiries; and though my opportunities in treating typhus have not been equal to those of the learned gentlemen above referred to, yet as my practice has extended to a great variety of diseases, I trust scientifically, altogether comprising many hundred cases, all bearing on the same point, my testimony to the astonishing success attending the use of *alkaline* medicines in typhus fever cannot be useless, as I rest on nothing but the fact for its value. I must beg you will be so kind as to afford me a little of your valuable space, and I will compress what I have to say into the smallest room I can.

Cases abridged from a Selection in my Case Book.

February 24, 1828. Miss ——, aged 19, was a delicate and very retired young lady. I found her very delirious, and acting reversely to her natural manner; her disease was a compound of typhoid delirium, and what is termed the high state in insanity. I took away twenty ounces of blood, gave immediately, subm. hydr. gr. v, and an effervescing draught every four hours.

25. No alteration; bowels moved but slightly. Continue the draught. Take

℞ *Subm. hydr.*, gr. vi;
Pulv. jalap., gr. viij. Statim.

26. Bowels effectually *unloaded*, but delirium and *mental irritability* unabated; shrinks on pressing the epigastrium.

℞ *Potass. carbonas.*, ʒij;
Aquæ menth. p., f. ʒvj. M. f. mistur. cujus capt. quart. part. 6ta. q. horâ.

27. Rational. Continue mistur. alkal. From this day she became convalescent, and was perfectly well on the 5th of March, and very little the worse for the fever.

April 20, 1829. Mrs. W——, aged 34, a thin little woman, whom I had attended in pleurisy some months prior, had typhus of a low type. Emetic; imprimis, calomel bolus, then

℞ *Subcarb. sodæ*, ʒij;
Spt. æth. nitro., ʒss;
Aq. menth. p. q. s. ft. h. hss. M. f. mist. cujus capiat coch. ij. 4ta. quâque horâ.

21. Up and collected, but feels giddy when standing. Cont.

22. Continues rational; less giddy; sound sleep. Cont.

23. All symptoms of fever subsiding. Cont.

24. Convalescent.

27. Quite recovered.

Betty Schole's son.—I was requested to see this boy, who was about nine years old, 21st April, 1829, eight days after he had been attacked with typhus fever. He had been under the care of an apothecary, who told me he had applied eight leeches to the temples, and given saline medicines. His pulse was 108, and thready; could not rise in bed; was perfectly delirious; lips dry; teeth covered with sordes; tongue parched; skin *crisp*; eyes languid and inexpressive; thirst very troublesome, *which was attempted to be allayed, as usual, by oranges, lemonade*, &c. Acids of all kinds prohibited, and spring water to be substituted, or common tea, or toast and water.

℞ *Sodæ carb.*, ʒj;
Sp. æth. n., ʒj;
Aq. menth. p., ʒiv; M. f. mist. capt. coch. ampl. j. 4ta. q. horâ.

Being at a distance, I did not see him on the 22d, but he was reported better. On the 23rd, countenance intelligent, and he is perfectly collected, &c. Cont. Sound sleep returned on the 26th, and his tongue was moist on the 27th, and clean on the 29th; but his pulse had got up to 120, from debility, I imagine. He gradually recovered.

In the neighbourhood of these two last cases, and during my attendance on them, I was requested to visit another lad of the same age, who had been under the care of the same medical man, and had received the same treatment. I saw him on the twelfth day of the disease, but he was dying, and I declined giving him any thing.

June 19th, 1829. I was requested to see a gentleman aged 33. He is a talented and well-informed man. He was aware that he had typhus fever. An emetic immediately.

℞ *Sodæ subcarb.* ʒiij.;
P. rhæi gr. vj. M. f. pulv. in chart. vj., divid. st. i. 3ta. vel 4ta. q. horâ.

20. All febrile symptoms subsided, but he was not perfectly well till ten days after.

A few months since, I had seven very bad cases at one time in one miserable family. They all recovered, though my fears induced me twice to abandon the alkali, only to be driven to it again as a forlorn hope. I scarcely need avow, that I consider the great cause of all the ailments in the cases I have related, as well as those to which I have alluded, was a peculiar morbid acidity in the stomach; and ample experience, backed as it is by the authority of Drs. Clanny and Stevens, justifies me in strongly recommending the use of the carbonates and subcarbonates of soda and potash, in all fevers of the typhoid character, *more especially as I have not lost a single case in which I have relied on these medicines*: but I can by no means say so much in recommendation of the neutral salts, or of the effervescing draught, because I am satisfied they are greatly inferior to the alkalies I have named; and I selected the first and third cases to show the decided superiority of the alkalies over both. You can, I doubt not, Sir, easily conceive the very great pleasure I derived from Dr. Clanny's practical researches into the state of the blood in typhus, when I saw how beautifully it harmonised with my own, as I thought, peculiar practice; and the very satisfactory explanation he gave of its *remote* influence in correcting the blood, by its immediate influence on the contents of the stomach, producing carbonic acid gas.

Glossop, near Manchester, June 14th.

PROPOSED SOCIETY OF "GENERAL PRACTITIONERS."

To the Editor of THE LANCET.

SIR,—The invitation to communicate, given by the "Metropolitan Association of General Practitioners," induces me to offer some remarks thereon; and for that purpose I prefer the pages of THE LANCET to the office of their solicitor.

Some such an association is greatly needed, but I am apprehensive that the necessity will be but ill supplied by the "Metropolitan," unless the committee will condescend to adopt some essential additions to their plan, without which the Society must be utterly useless, and serve only to gratify the appetite for notoriety, which may be possessed by its managers. I shall take the liberty to object to its prospectus, in the hope that it may lead to its amendment; for without such emendations, it is entirely unworthy the support of that class which it professes to advocate and protect.

The title is an absurdity, or, at best, a paradox; where is the propriety of calling it "Metropolitan," if it be intended to consist of the whole body? Why not alter this? Why does it not make a provision against the injurious operation of corporate bodies, and the machinations of the exclusive practitioners? There is no resolution enjoining the members to refuse to meet "exclusive practitioners," who send their prescriptions to a druggist or pet-apothecary, and take a percentage on the profit. There is no resolution enjoining the members to discourage needless consultations with "exclusive practitioners," which consultations too often tend to fill the pockets of the "exclusive," empty those of the patient, and prejudice the reputation of general practitioners. Let the "Association" enjoin its members to consult each other in cases where it may not be objected to by the patients and friends; an immense advantage would accrue to the adoption of this measure; as the emoluments derivable from consultations would be confined chiefly to their own class, the patient must derive always *equal*, and sometimes *greater*, benefit from this course, and at a much smaller cost, than by submitting to the iniquitous exactions of the "exclusives." Let the "Association" become a COMBINATION; let it organize CO-OPERATIVE branches throughout the country, and in one year the character of the general practitioner will be exalted, and his emoluments increased; the "Association" will have no necessity to make fruitless applications for legislative enactments to establish what is no longer mooted, namely, their right to recover for attendance as well as medicines; and should

the Association be so fortunate as to collect a fund for the distressed members, the claimants will be marvellously few.

The prospectus does not mention the names of the projectors and the present committee (except the highly respectable president); is it expected that the general practitioners will pledge themselves to men unknown? The committee should be selected from men of unimpeachable integrity, irreproachable character, and great influence in society. Many useful measures have been lost by neglecting these particulars, and permitting the interference of men of no character, or of bad character, or of questionable character, or of men who, whatever their moral worth, were too obscure to command the respect and attention of those to whom they were unknown. The committee of the "Association" may be men every way eligible, but until we know who they are, they are not entitled to our alliance. Their meetings and proceedings ought to be open and public, and then they must be above suspicion. I am, Sir,

Yours respectfully,

A General Practitioner.

ROYAL WESTERN HOSPITAL.

DR. AYRE.

The following is the letter referred to in Dr. Ayre's communication of last week:—

To W. N. Beechey, Esq.

Dear Sir,—It is with feelings much wounded that I now address you. The subject of the two last special meetings of the Western Hospital, has received my most serious deliberation, and the result compels me to beg you will tender my resignation as one of the committee, to my brother managers of the Western Hospital.

In taking this step, I feel the necessity of entering into some explanation, in which I will be as brief as possible. The charges, in the first place, brought by Mr. Sleigh against Mr. Truman, were, according to my opinion, *refuted* by the latter gentleman most completely. Not only, therefore, do I consider Mr. Truman blameless, but I feel that we are indebted to him for having ascertained what the real state of the establishment is, in lieu of the garbled statements that have from time to time been exhibited. My next view of the proceedings is, that the charges brought against Mr. Sleigh are *completely substantiated* by the evidence of Dr. Ayre and Mr. Truman. To these gentlemen, therefore, I individually feel the greatest obligation for their spirited and independent conduct. The situation of surgeon to an hospital should be held by a man of the most unblemished character; against the breath of calumny he should be proof; amongst the profession he should (I will go the length to say) be beloved, upon the principle that subscribers would generally appeal to their medical advisers previously to supporting an establishment which, from its recent formation, depends for its fame upon the medical officers; if it were necessary, by way of confirmation, I would quote what Sir Charles Scudamore said. With an opinion thus formed, after the withdrawal of the medical officers, I at once suggested our recommending Mr. Sleigh to resign, most fully bearing in mind Sir Charles Scudamore's parting injunction, of considering the welfare and prosperity of the hospital, instead of this or that individual; as these my sentiments were not concurred in, of course the suggestion fell to the ground.

Again, I cannot regard the services of Mr. Sleigh in the same light as most of the committee. So far from their being valuable to the establishment, I pronounce them to be most *inimical* to it; but for the unwarrantable outlay made by that gentleman (*to suit his own private ends*, and by him admitted), public charity and benevolence would have met the objects for which the institution was formed; and in lieu of your committee being threatened with actions by a body of creditors, they would have had the pleasing satisfaction of making a favourable report at the ensuing annual meeting; and when once established, by that I mean firmly, and the funds increasing, Mr. Sleigh, on appealing to that Committee of management, would have received from it every assistance, in his desire of forming a school. His too hasty conduct has, I fear, ruined an establishment which was calculated to have relieved suffering humanity to an extent which, sanguine as I was at one time, might far have exceeded my ideas.

With these sentiments, you will see the impossibility of my setting at the same board with gentlemen with whom in opinion I so differ, but at the same time respect most highly. May every success attend them in so excellent a cause, is the prayer of, dear Sir,

Yours very sincerely,

(Signed) A. P. Johnson."

Lloyd's Coffee House,
Dec. 3rd, 1829.

MR. SLEIGH.

To the Editor of The Lancet.

Sir,—I beg once more to trouble you, not that I consider Dr. Ayre's letter requires a reply, or that he himself is worthy the notice of any man, "his tongue

being no slander," but because I feel it a duty to the public to show him up in his true character—to warn the profession of such a man (as I would of a mad dog), in order that, knowing him, they may not suffer (as I have) by his malice and artifice; and that his case may be a warning to others of what an example a man may make himself, when once he has departed from the principles (if ever he possessed them) of truth and honour. I have acted with respect to Dr. Ayre, according to the vulgar, but not less applicable adage, "give a dog rope enough and he will hang himself;" and although I was fully aware that a gentleman could not wrestle with a sweep without soiling his hands, yet I was determined he should not, with all his art and sophistry, escape from my grasp, till I had made him a public example.

The following is a brief view of some of Dr. Ayre's assertions, misstatements, and contradictions:—

Dr. Ayre asserted in his letter in last Saturday's LANCET:—

1st. "The committee are about publishing an elaborate statement of this individual" (Mr. Sleigh).

2d. "The *same* committee which had expelled him (Dr. Ayre), had completely revoked" it.

3rd. "A deputation from that committee waited on him (Dr. Ayre) to apologise for the part they had acted towards him."

4th. "In fact, that *same* committee have since expelled Mr. Sleigh."

Mr. Cowne's Statement.

"Eight out of eleven of the committee which unanimously expelled Dr. Ayre on the 5th of last December, *unequivocally declare*:—

1st. "They never entertained the least idea of publishing any thing respecting Mr. Sleigh.

2nd. "They *never revoked*, nor *even regretted*, their having expelled Dr. Ayre.

3rd. "They never authorised any deputation to wait on Dr. Ayre.

4th. "They never directly or indirectly sanctioned any vote derogatory to the character of Mr. Sleigh, much less to putting him out of the hospital: moreover, without them no *special* meeting could have been held, there being only three more members, and the laws requiring *nine* to constitute such a meeting—hence none of the above acts could have been done.

"SAMUEL COWNE, one of the auditors appointed by Dr. Ayre's friends at the public meeting of the 19th ult.

"June 22nd, 1830, 78, Connaught Terrace."

5th. Dr. Ayre asserted in this Journal, "I had swindled a *minor* out of 1500*l.* in bills."

Letter from this Minor.

5th. "Dear Sir,—Understanding that I am the minor alluded to as having paid you 1500*l.*, I hereby certify that I have never had *any money transactions whatever* with you, except having paid you fifteen pounds as a pupil for attendance on your lectures. I am, dear Sir, yours truly.*

"June 15th, 1830.

"To W. W. Sleigh, Esq."

6thly. "Dr. Ayre asserted in last Saturday's LANCET, that the letter from my pupils "was obtained by *threats* and various *other arts*." "He has not told you," said he, "what he paid for them."

To W. W. Sleigh, Esq.

6th. "Sir,—Having perceived in last Saturday's LANCET a letter from Dr. Ayre, to which, we understand, you intend replying, containing an assertion, 'That the signatures to the letter from us, dated Jan. 11th, 1830, were procured by *threats* and various other *arts*,' we, on the part of ourselves, *positively deny* the truth of this assertion; and, to the best of our knowledge and belief, for the rest of our fellow-pupils, who not being in town at present, cannot sign this.

"Henry Sullivan, A. Dillon, John Hallaran, J. Glisson, W. J. Rose, R. J. Farrants, J. O. Sullivan, J. N. Walters, John Lynn.

"June 21st, 1830."

* As the gentleman's name has not been published by Dr. Ayre, he requested I would not publish it; but I have left the original, which has his name, with the house-surgeon of the hospital, for the perusal of Dr. Ayre, to prevent his insinuating it was not the same person.

7th. Dr. Ayre asserted, "he (Mr. Sleigh) swindled many young men as demonstrators."

8th. Dr. Ayre asserted, "he (Mr. Sleigh) deceived his pupils."

9th. Dr. Ayre asserted, "he (Mr. Sleigh) wanted to make a job of the hospital."

10th. Dr. Ayre asserted last January in this Journal, when *it answered his purpose*, "that I had not ten pupils."

11th. Dr. Ayre asserted, "he never adopted any dishonourable means to injure the hospital."

12th. Dr. Ayre asserted, "Sir Charles Scudamore was not even present" when the rule for attending servants was proposed at the committee.

7th. The letters from, and references to, my demonstrators, which appeared in THE LANCET of the 12th instant, *not one of which* has been disproved, contradict this.

8th. The letter signed by *twenty of my pupils*, and published on the 12th instant, contradicts this.

9th. The documents published by me on the 12th instant, and signed by C. Scudamore, W. B. Lynn, R. Hicks, M. Truman, and Joseph Ayre *himself*, contradict this.

10th. In his letter of last Saturday, he says (alluding to the letter signed by *twenty* of my pupils), "Mr. Sleigh has not told you of the *still greater* number who refused to sign it." Now that it *suits him*, I have upwards of *forty!*

Mr. Cox's Statement.

11th "Dr. Ayre called on me, and asked me 'If I were collecting for the hospital?' I replied, 'Yes.' Then, said he, 'You or any one else so doing, are assisting in a fraud upon the public.'

"J. COX, Collector.

"Portman Street, May 6th, 1830."

12th. It appears from the Minute Book of the hospital in Mr. Beechey's *hand-writing*, that Sir Charles Scudamore *was present* on the 6th of April, 1829, when the rule for attending servants was passed.

SAMUEL COWNE, Auditor.

June 22d, 1830.

* * * * * * * * *

Your very obedient servant,

W. W. SLEIGH.

[We cannot insert the remainder of this letter for two reasons:—first, we have not space for it, and, secondly, it contains innumerable libels. Mr. Sleigh should bear in mind, that a libel upon an attorney is not quite so easy to defend as to write. The controversy upon the affairs of the Western Hospital, has already extended to an unreasonable and inconvenient length, and the papers in this week's LANCET, are the last that can be inserted upon the subject. Any further letters must be printed on the wrapper, and paid for as advertisements.—ED. L.]

RESOLUTIONS RESPECTING MR. SLEIGH.

THE auditors, appointed at a general meeting of the subscribers, presented their report to an open meeting of the "governors," held on the 14th instant. Appended to the report are the two following resolutions.

1st. Resolved,—That this report be received and approved of. That the future services of Mr. W. N. Beechey, are in consequence dispensed with, and that he be desired to deliver forthwith into the hands of the Treasurer of this hospital, all books and papers connected with this institution. And that, at the meeting of subscribers, to be held on the first Monday in July, pursuant to the resolutions of the general meeting, held on the 19th ultimo, the situations of physician, junior surgeon, and secretary be filled up.

2nd. Resolved,—That this meeting cannot separate without expressing their unanimous opinion, that the professional skill and the integrity of Mr. Sleigh stand unimpeached, and that he is, in every way, worthy of the full confidence of the subscribers at large.

CHARGE FOR ATTENDANCE UPON AN HOSPITAL PATIENT.

To the Editor of THE LANCET.

SIR,—The statements I am about to make will satisfy you and the readers of THE LANCET, whether Mr. Sleigh's communication or mine is entitled to most credit.

On Tuesday, the 23rd of March, the child was taken to the hospital, dressed by the young men there, who were *not* told that he was the son of a Member of Parliament, as Mr. Sleigh states; and I again repeat that the nurse gave them sixpence to buy plaster.

She did not object to the boy's being a hospital patient, but objected to leave him there, because she, in common with all the neighbourhood, knew that the hospital had not common necessaries for its inmates. On the following morning, Mr. Sleigh visited the child, wrote for a powder, and observed, that from what he had heard, he expected to find it dead, then left, and neither he nor his pupils saw the child from that time till Saturday, and would not then have done so had not the woman taken it to the hospital; yet Mr. Sleigh says, this was a "private" patient. Mr. Sleigh, at this visit, told the woman, on her complaining of his not having been to see the child, that she must get a recommendation from a subscriber. This she said she could do, naming a Member of Parliament, in whose service she had resided. Mr. Sleigh immediately caught at the gentleman's name, and wished the woman to procure a recommendation from him, for he wanted him to take the chair at a public meeting, and say something in favour of the hospital. He said he had already a half promise from him, and could he mention this case as having been attended at the hospital, it might be an inducement for him to attend; and then had the impertinence to say, that as it was a nurse-child, perhaps it was his, the M. P.'s. The woman replied, that she did not know whose it was; she had never, to her knowledge, seen the father. With the exception of two or three pupils' visits, the child afterwards regularly attended for six weeks, and took its turn with the other out-patients. Not a word respecting "charge" was mentioned until the last day of attendance.

Such, Mr. Editor, was the case of "attendance upon the son of an M. P.;" such was the case of a "private" patient; and such the conduct of one of our "pure hospital surgeons."

SCRUTATOR.

ON THE MEDICAL USES OF

TOBACCO,

WITH REMARKS

On some symptoms in Children erroneously attributed to Congestion of the Brain.

THE following observations are the result of a careful and rather extended employment of tobacco, in cases wherein I propose it as a valuable addition to the list of remedies now in use. I claim no originality in the suggestion, for others may have instituted similar experiments, with, perhaps, similar results. I am induced to acquaint your readers with these results, in the hope that they will proceed in the necessary inquiry—Whether we can add another powerful auxiliary to our somewhat limited means of relieving several of the most distressing affections?

In hooping-cough; retention of urine, from spasmodic stricture; and that curious, but common affection, popularly called "spasmodic asthma;" I have employed a tincture of tobacco, prepared by adding one ounce of the dried leaves to a pint of proof spirit.

In pertussis, in addition to the remedies indicated by particular symptoms, such as leeches to the head, occasional emetics, mercurial aperients, and the warm bath, (which although always useful, are never so completely curative as to leave us nothing to desire), this tincture has frequently afforded signal relief. When the influence of the medicine has been kept up in a slight degree, the ensuing paroxysms of the cough have been milder, and the intervals of their occurrence longer than I have seen from any other remedy, except once from the effect of hydrocyanic acid. In these cases, from one to eight drops of the tincture were given every two, three, four or five hours.

In spasmodic, supervening on permanent, stricture, I have seen the introduction of the catheter, and sometimes the voluntary evacuation of the bladder, practicable, in a shorter time from the use of the tobacco, than from the adoption of ordinary and tolerably efficacious measures. In two cases the bleeding, commonly premised, was dispensed with; and in every case it has superseded the opium and purgatives generally employed, by producing the combined effects of both in a much shorter time. From five to thirty drops were given every fifteen or twenty minutes, until the patients were under its *full influence*, i. e. nausea, vertigo, vomiting, faintness, and purging.

In "spasmodic asthma," the tobacco has been productive of the greatest advantage, when given in small doses every five or ten minutes, until the patients have become affected by it to faintness, with vomiting and free evacuation of the bowels; relief from the "embarrassment," followed by free expectoration, has been the almost invariable effect in these cases.

Its action appears to be similar to the combined effects of blood-letting, opium, and purgatives, without some of the disadvantages of the two former, and with the advantage of acting as an aperient in a much shorter period than any other. It is unnecessary to enter into more minute details; enough, may I hope, has been said, to induce the enterprising practitioner to give it a fair trial and return a candid report.

I hope to be pardoned for volunteering what may be deemed a gratuitous opinion,

that Dr. Gooch's last work is the most valuable addition which has lately been made to medical literature. It is purely practical, and although the bulk of the information is not original, yet it is of infinite value, and with many will possess the merit of perfect novelty, especially that portion to which I wish to draw the attention of those of your readers who may not possess the work soon, or, at all,—his description of "some symptoms in children, erroneously attributed to congestion of the brain." In confirmation of the correctness of Gooch's views, the humble testimony of an obscure individual may be considered of little value; I am not anxious that any importance should be attached thereto; I say for it what the Doctor urged upon the same subject: "I do not expect that medical men will take my word as conclusive evidence for the truth of this paper, neither do I wish it; all I ask is, that they will allow my observations and reasoning to induce them to look out for themselves."

The object of his paper is to show "that heaviness of the head and drowsiness in children often depend, NOT on congestion, but on deficiency of nervous power, and require for their cure NOT depletion, but support." Contingent on this is another opinion, "that sudden effusion of serum may take place in the brain from a state of the circulation, the opposite of congestion or inflammation."

Of the truth of the foregone and the following quotations, I am convinced; neglect or ignorance of the inferences to be drawn from them I have seen in many cases, and have witnessed, in a multitude of dissections the confirmation of their correctness.

"I am anxious to call attention to a disorder of children, which is invariably attributed to, and treated as, congestion of the brain. It is chiefly indicated by heaviness of head and drowsiness; the ages of the little patients have generally been from a few months to two or three years; they have been rather small of their age, and of delicate health, or, they have been exposed to debilitating causes. The child is found lying on its nurse's lap, unable or unwilling to raise its head, half asleep, one moment opening its eyes, the next closing them, with an expression of languor. The tongue is slightly white, the skin is *not hot, at times* the nurse remarks that it is colder than natural; *sometimes* there is a slight and transient flush; the bowels have been generally disturbed by purgatives. There have been no signs of pain * * * *. The cases I have seen, have been invariably treated as congestion of the brain, by leeches and cold applications to the head, and purgatives, especially calomel. Under this treatment they have gradually become worse, the languor has increased, the deficiency of heat has become greater and more permanent, the pulse quicker and weaker, and at the end of a few days, or a week, or sometimes longer, the little patients have died with symptoms, apparently, of exhaustion. In two cases I have seen, during the last few hours, symptoms of oppressed brain, as coma, stertorous breathing, dilated and motionless pupil." The children thus affected and thus treated, when examined after death, do not present the usual and admitted evidences of inflammation of the brain, for the vessels are empty; although the ventricles contain an excess of fluid, various in amount.

I would have it particularly observed that Dr. Gooch lays great stress on the necessary distinction to be made between this affection, and inflammation and congestion of the brain; and that he is as earnest in his advocacy of the most active depletory and antiphlogistic measures in the latter condition, as in his condemnation of them in the affection attended by "symptoms erroneously attributed to congestion of the brain." The following appear to be the points of difference:—Inflammation *generally* occurs in subjects not previously reduced by immediately previous illness or active remedies; and in robust sanguineous temperaments; from mechanical injuries, the irritation of teething, or stimulating food and drinks; it is always attended by a considerable elevation of the temperature of the surface, especially of the head; the countenance is flushed, and the eyes are intolerant of light; there is obviously some degree of pain indicated, by shrieking, raising the hands to the head, and, in advanced periods of infancy, by more intelligible complaints; by vomiting at the commencement, and convulsions towards the close of the disease. Remedies have different effects, according to the different states of the patients. In inflammation, or congestion, the patient derives striking benefit from the loss of blood, and the application of cold, and the use of mercury. The appearances on dissection generally prove the preceding disease, by exhibiting some structural alteration, more or less, and always recent, such as suppuration, thickening and adhesion of the membranes, especially of the arachnoid; softening of the substance of the brain; effusion of lymph on its surface, or between the membranes; the substance of the brain highly injected, etc.

In that state shown by "symptoms erroneously attributed to congestion of the brain," a very different condition prevails. The pulse is quick and weak. There is generally a diminution of the temperature of the surface; any exception to this is extremely rare, and always transient; there is not any evidence of pain, not often restless-

ness; the eyes are not intolerant of light; convulsions do not often accompany, but when they do, they are neither so frequent nor so severe as in inflammation; the condition and symptoms are usually preceded by the effects of debilitating treatment, or other depressing causes—weaning, diarrhœa, insufficient nourishment, as the patient has generally been the subject of previous disease, and is not convalescent at the accession of the "symptoms erroneously attributed to congestion of the brain." Further depletion invariably aggravates the symptoms; any but the mildest aperients increase the evil, and even they cannot often be resorted to with impunity. Light, nutritious, and unirritating nourishment, frequently administered, affords the greatest relief; cordial medicines, and small doses of opium (when the child is restless), are indispensable; cold to the head, and the smallest doses of mercury, manifestly increase the evil. Reaction from this plan of treatment never assumes the characters of, nor amounts to, inflammation. On dissection the vessels of the brain are usually empty; the substance of the brain does not exhibit the bloody points that are witnessed on slicing a brain which has been inflamed; the meninges show no traces of inflammation—*at least, recent inflammation*. The fluid always exceeds the natural quantity, but is never very considerable, seldom amounting to an ounce and a half.

This subject has attracted the attention of Drs. Abercrombie and Marshall Hall, whose works may be consulted in vain for more accurate information than is contained in Dr. Gooch's remarks.

June 10, 1830. T

Hydrophobia in Sheep.—In proof that sheep affected by rabies do not communicate the disease, *Dr. Taylor*, of Kingston, has forwarded to us the following statement of an occurrence which took place in the flock of his friend George Allan, Esq., residing in that neighbourhood:—"Early on the morning of the 8th of March last, the servant of Mr. Allan found two of the lambs in the field much torn, the one being dead, and the other dying. Eight sheep were observed to have wounds about the face, nose, and mouth. The rest of the flock (which was small) exhibited no marks, nor did the remaining lambs. The whole of them, however, remained in the same field, and appeared not to have suffered any material harm; but, at the expiration of nearly three weeks, one of the bitten sheep was observed to be continually chasing the lambs, and butting them. On the following day she butted any person who entered the meadow; and when no moving thing was near, she butted violently against the trees, posts, &c., until the integuments of the head were frightfully contused. She *drank water* and grazed, but continued with the same butting propensity for four or five days, when she died. The remaining seven were, within the succeeding fortnight, attacked with precisely the same train of symptoms, and died at the expiration of a few days. None, however, of the other sheep or lambs, although constantly mingling with their bitten fraternity, exhibited any appearance of ailment. These then were cases of rabies in the sheep, and were, beyond all doubt, occasioned by the bites of a bull-dog which had gone mad here just previously, and had bitten several persons, in whom I performed excision; the animal was not caught in the act of biting the sheep." The body of the dog, when examined by Dr. Taylor, presented the morbid appearances of rabies. In the sheep no morbid alterations were found, with the exception of a distended condition of the vessels of the membranes covering the brain.

Bedford and Northampton Infirmaries. —*A Bedfordshire Surgeon* complains, that to add to the many other disadvantages under which the members of the profession in his neighbourhood labour, "the house-surgeons of the Northampton and Bedford Infirmaries have of late taken to vaccinate gratuitously all persons who have thought proper to apply to them. The example was first set at the former hospital, and is now followed by the latter. It is no unusual circumstance (he adds) to see wagon-loads of children sent from the different parishes to be vaccinated at the infirmary, the whole parish not subscribing perhaps more than 2*l.* per annum to the institution. To such an extent is this practice adopted, that Mr. Marsh, house-surgeon to the Northampton Infirmary, in the course of a few months, vaccinated no less than 10000 individuals, for which the liberal directors of the institution, with the Marquis of Northampton at their head, voted him the handsome present of 5*l.* from the funds of the hospital! These glaring injuries to the profession ought to be stopped; while young men are compelled to submit to all the drudgery of the dispensary, it is really hard that the more advanced practitioners, viz. the physicians and surgeons of these institutions, should do every thing to prevent their obtaining honourable modes of living." If an excuse can be found for indiscriminate gratuitous practice in any branch of the medical profession, it certainly is offered in disseminating the protecting principle of the vaccine virus against the horrid ravages of the small-pox.

GUY'S HOSPITAL. "To the Editor of THE LANCET. Sir,—You will render the pupils attending the surgical practice of Guy's Hospital very essential service, if you can, by any means, induce the surgeons to direct their dressers to state on the bed tickets, the disease by which each patient is affected. I feel confident, that if the surgeons for a moment gave it a thought, they would cause it to be done. I am, Sir, your obedient servant, A WEBB STREET PUPIL.—June 16."

FRAUDS ON ST. THOMAS'S HOSPITAL.—*Mr. Dewhurst* informs us, that there are many persons residing in the neighbourhood of Plumstead, in Kent, "who make it a common practice to apply as out-patients of St. Thomas's Hospital, and procure, by false representations, pills containing the sulphate of quinine, which, on their return, they retail with considerable profit, as the '*Thomas's Hospital Pills*,' to their aguish neighbours, amongst whom they are in great request. This extensive and disgraceful fraud (he adds), I conceive, deserves some inquiry on the part of the medical officers of the hospital, who have been most shamefully imposed upon, to the injury of the institution, and many medical practitioners."

TO CORRESPONDENTS.

WE have not space for the statements and complaints which our correspondent Σ makes against the Commisioners of the City Court of Requests; and moreover, the censure he conveys would probably be deemed libellous upon the liberal judges with whom his friend has had to contend. The fault is in the constitution of the Court.

We cordially hope, with *Reformer*, that the parliamentary investigation to which the Irish Apothecaries' Company is about to be subjected, will produce a reform in the many abuses, of which those who are connected with it have so much reason to complain.

Zeno. A Subscriber. R. E. &c. The purchaser of a medical practice must take the *chance* of retaining those patients, to whom it is the business of the seller to introduce him. With a due exercise of caution, there is little risk in such a purchase as *Zeno* contemplates; he should apply to a respectable medical agent. Such is the state of medical law, that a man can practise in London, as a surgeon, without any diploma.

We could not publish the unauthenticated letter of a *Borough pupil*; but we believe that his complaints, respecting the irregular attendance of the surgeons, are too well founded.

A Medical Assistant inquires, what is the cause, and where is the remedy, for the ill-rewarded and degraded state of the class to which he belongs. Although the cause of the evil is obvious enough, it is not very easy to suggest a remedy. The number of persons seeking for situations, as medical assistants, far exceed the demand. The market is evidently overstocked.

Gymnotus. Galvanism and electricity have been repeatedly tried, and have failed.

The mere announcement which *Mr. W. H. Potter* wishes us to make would accomplish no object. Whenever his experiments are sufficiently multiplied and decisive to authorise him to subject them to public scrutiny, we shall be happy to afford him space for whatever useful information he may have to communicate to the profession.

Inquirer. The "silk" are the best, and may be obtained at any of the surgical instrument makers.

The paper of *Mr. Watson*, on the "gross misconceptions and disingenuous representations" which characterise a late "prize review" of Thomas's, *Physiologie des Temperamens*, would not be understood by our readers, as it is most likely that not one of them has waded through the trashy review in question.

We regret that we cannot reply to Mr. ————, of East Street, Southampton, in a way that would suit his views. Each ——— is full.

If the subscribers to the library of the London Hospital are not satisfied with their librarian, they should appoint another. The conduct of the individual who now fills that office, appears to be productive of well-grounded displeasure with nearly the whole of the students. It is the duty of the medical officers of the institution to exercise their authority on the occasion, and promote, as far as they are capable, the interests of those gentleman by whom they are so liberally paid for instruction.

A Constant Reader. As far as we understand the arrangements from what has already transpired, the religious service to be observed in the projected metropolitan cemetry, is not to be restricted to one form of burial.

BOOKS FOR REVIEW.

The fourth and concluding volume of Dr. Collier's Latin and English Celsus, forming altogether a neatly-printed pocket edition of that author.

An Account of the Varieties in the Arterial System of the Human Body. By P. H. Green, A.B., M.D., Trin. Coll. Dublin. With plates. Dublin. J. M. Leckie. 1830. 8vo. pp. 39.